AGENDA
RIO DELL CITY COUNCIL
CLOSED SESSION – 5:30 P.M.
REGULAR MEETING– 6:30 P.M.
TUESDAY, MARCH 6, 2012
CITY COUNCIL CHAMBERS
675 WILDWOOD AVENUE, RIO DELL

***WELCOME** . . . By your presence in the City Council Chambers, you are participating in the process of representative government. Copies of this agenda, staff reports and other material available to the City Council are available at the City Clerk's office in City Hall, 675 Wildwood Avenue. Your City Government welcomes your interest and hopes you will attend and participate in Rio Dell City Council meetings often.*

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Office of the City Clerk at (707) 764-3532. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to assure accessibility to this meeting.

THE TYPE OF COUNCIL BUSINESS IS IDENTIFIED IMMEDIATELY AFTER EACH TITLE IN BOLD CAPITAL LETTERS

A. CALL TO ORDER

B. ROLL CALL

C. ANNOUNCEMENT OF ITEMS TO BE DISCUSSED CLOSED SESSION AS FOLLOWS:

1) 2012/0306.01 - CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION: Significant exposure to litigation pursuant to Subdivision (b) of Section 54956.9: 2 potential cases – facts and circumstances not yet known to adverse party. (Government Code Section 54956.9(b)(3)(A).)

D. PUBLIC COMMENT REGARDING CLOSED SESSION

E. RECESS INTO CLOSED SESSION – 5:30 p.m.

F. RECONVENE INTO OPEN SESSION

G. ORAL ANNOUNCEMENTS

H. PLEDGE OF ALLEGIANCE – Two (2) Girl Scout Troops will lead ceremony

I. CEREMONIAL

2012/0306.02 – Proclamation in Recognition of Girl Scouts Week March 11-17, 2012 **1**

J. PUBLIC PRESENTATIONS

This time is for persons who wish to address the Council on any matter not on this agenda and over which the Council has jurisdiction. Items requiring Council action not listed on this agenda will be placed on the next regular agenda for consideration, unless a finding is made by at least 2/3rds of the Council that the item came up after the agenda was posted and is of an urgency nature requiring immediate action. Please limit comments to a maximum of 5 minutes.

K. CONSENT CALENDAR

The Consent Calendar adopting the printed recommended Council action will be enacted with one vote. The Mayor will first ask the staff, the public, and the Council members if there is anyone who wishes to address any matter on the Consent Calendar. The matters removed from the Consent Calendar will be considered individually in the next section, "SPECIAL CALL ITEMS".

1) 2012/0306.03 - Approve Minutes of the February 21, 2012 Regular Meeting **(ACTION)** **3**

L. SPECIAL PRESENTATIONS

1) 2012/0306.04 - Humboldt Waste Management Authority (HWMA) Discussion/ Recommendation Related to Plastic Bag Ban Ordinance **(ACTION)** **14**

2) 2012/0306.05 - Video Presentation on Sewer Repair Patch Kit

1) 2012/0306.06 - Mid-Year Budget Review & Proposed Amendments

M. SPECIAL CALL ITEMS/COMMUNITY AFFAIRS

1) "SPECIAL CALL ITEMS" from Consent Calendar

2) 2012/0306.07 - Approve Award of Bid to Wahlund Construction, Inc./Sequoia Construction Specialties, Joint Venture (Wahlund) for the Wastewater Treatment Plant Upgrade and Disposal Project and Authorize the City Manager to Execute the Contract Documents **(ACTION)** **18**

3) 2012/0306.08 - Approve Laco Associates Service Agreement for Construction Testing and Inspection for Wastewater Project 2 in an Amount not to Exceed $41,030.25 and Authorize the City Manager to Execute the Agreement **(ACTION)** **20**

N. ORDINANCES/SPECIAL RESOLUTIONS

3) 2012/0306.09 - Discussion of Draft Ordinance No. 288-2012 Cross Connection Control Regulations **(DISCUSSION)** **85**

4) 2012/0306.10 - Conduct Second Reading (by title only) and Approve Ordinance No. 286-2012 Approving General Sewer Use Regulations and Rates **(ACTION)** **86**

O. REPORTS/STAFF COMMUNICATIONS

1. City Manager
2. Chief of Police
3. Finance Director

P. COUNCIL REPORTS/COMMUNICATIONS

Q. ANNOUNCEMENT OF ITEMS TO BE DISCUSSED CLOSED SESSION AS FOLLOWS:

R. PUBLIC COMMENT REGARDING CLOSED SESSION

S. RECESS INTO CLOSED SESSION

T. RECONVENE INTO OPEN SESSION

U. ORAL ANNOUNCEMENTS

V. ADJOURNMENT

The next Regular meeting will be on March 20, 2012
at 6:30 PM in the City Council Chambers

675 Wildwood Avenue
Rio Dell, CA 95562

STAFF REPORT

TO: Mayor and Members of the City Council

THROUGH: Ron Henrickson, City Manager

FROM: Karen Dunham, City Clerk

DATE: March 6, 2012

SUBJECT: Proclamation in Recognition of Girl Scouts Week March 11-17, 2012

RECOMMENDATION

Introduce Girl Scout Troop 70068 along with a junior troop, invite them to lead the flag salute and present the Proclamation in recognition of Girl Scouts Week March 11-17, 2012 in Commemoration of the 100th Anniversary of Girl Scouts of the USA.

BACKGROUND AND DISCUSSION

Heather McTigue, troop leader of Troop 70068 will be present with her troop and a junior troop to lead the flag salute and receive the proclamation.

ATTACHMENTS: Proclamation

girl scouts
of northern california

Girl Scouts of the USA celebrates 100 Year Anniversary

WHEREAS, on March 12, 1912 the first Girl Scout meeting was held in Savannah, Georgia; and

WHEREAS, this first meeting was led by Juliette Gordon Low, the founder of Girl Scouts of the USA after visiting the founders of both Boy Scouts and Girl Guides in England; and

WHEREAS, whereas since this first meeting more than 50 million girls have participated in the Girl Scout movement during their childhood; and that number continues to grow as Girl Scouts of the USA continues to inspire, challenge, and empower girls everywhere; and

WHEREAS, there are currently 47,000 girl and 32,000 adult members in the Northern California Council and 3.2 million members in the USA; and

WHEREAS, through its membership in the World Association of Girl Guides and Girl Scouts (WAGGGS), Girl Scouts of the USA is part of a worldwide family of 10 million girls and adults in 145 countries; and

WHEREAS, Girl Scouts is the largest, longest running and most effective leadership program for girls in not only the nation, but the world; and

WHEREAS, 69% of current women US Senators and 65% of women in the House of Representatives were Girl Scouts when they were girls; and

WHEREAS, 55% of all women astronauts are former Girl Scouts and former Girl Scouts have flown in over 1/3 of all space shuttle missions; and

WHEREAS, an estimated 80% of women business executives and business owners were once Girl Scouts; and

WHEREAS, countless women educators, scientists, and women in the media and performing arts discovered their passions and talents as Girl Scouts; and

WHEREAS, 64 % of today's female leaders listed in *Who's Who of American Women* in the United States were once Girl Scouts; and

WHEREAS, Girl Scouts in the 1900's developed the same core values while learning housekeeping and forestry badges as girls today learn while earning computer technology and financial literacy; and

WHEREAS, we know that Girl Scouts develops girls of Courage, Confidence and Character who make the world a better place; and

NOW, THEREFORE, BE IT RESOLVED, that we, the City Council of the City of Rio Dell, are proud to join the Girl Scouts of Northern California in recognizing the 100th Anniversary of Girl Scouts of the USA.

_____

Julie Woodall, Mayor

RIO DELL CITY COUNCIL
REGULAR MEETING
STUDY SESSION
FEBRUARY 21, 2012
MINUTES

The Regular Meeting/Study Session of the Rio Dell City Council was called to order at 5:30 p.m. by Mayor Woodall.

ROLL CALL: Present: Mayor Woodall, Councilmembers Leonard, Thompson and Wilson

Absent: Councilmember Marks (excused)

Others Present: Study Session: City Manager Henrickson, Chief of Police Hill and City Clerk Dunham

Regular Meeting: City Manager Henrickson, Chief of Police Hill, Community Development Director Caldwell, Water Superintendent Jensen, Finance Director Beauchaine and City Clerk Dunham

STUDY SESSIONS/PUBLIC HEARINGS

Animal Control Ordinance

Chief of Police Hill provided a brief staff report stating that he had been tasked with rewriting the Animal Control Ordinance and as a result it went through the planning commission for review and comment on two occasions and those recommendations have been incorporated into the draft ordinance now being presented to the Council for review and comment.

Councilmember Leonard commented that he thought the ordinance was well written and the only thing he felt was missing related to service animals.

Chief Hill continued with a page by page review of the draft ordinance.

He commented that one concern of the planning commission was that the draft ordinance did not contain provisions for breeding. He stated a breeding ordinance could be entertained at a later time however breeding is not the intent of this ordinance.

Councilmember Thompson referred to Article 3, Definitions, where it stated that the Chief Animal Control Officer shall mean the Chief of Police and suggested the department that encompasses the Animal Control Department be defined rather than the Chief of Police as an individual. Chief Hill commented that he has the authority to designate anyone within his department specific duties, but ultimately he is the responsible party as head of the department.

Councilmember Thompson then referred to the bottom of page 2 related to animals and loud noise and said perhaps cats should not be excluded since they along with dogs, can make a lot of noise.

Chief Hill stated that cats are basically a free spirit but if a nexus can be made that the noise is disturbing, he could cite the owner under the City's noise ordinance.

Councilmember Thompson said that he felt that 30 minutes of continuous barking was too long; he suggested it be changed to 15 minutes. He also suggested there be included in the ordinance a muzzle requirement as a form of restriction to barking.

Chief Hill pointed out that in the big picture there is not much difference between 15 or 30 minutes of continuous barking. Councilmember Thompson said that if you wait 30 minutes then you call the police it could realistically become 45 minutes to an hour of barking due to the officer's response time.

Consensus of the Council was that the 30 minutes of continuous barking be reduced to 15 minutes.

Councilmember Thompson commented that the idea is to encourage citizens to walk or ride bicycles and dogs charging over fences will discourage it. He said one way to avoid this would be to require that dogs be closed off within the interior part of the yard.

Chief Hill referred to Article 11 of the ordinance related to regulation of vicious animals and said this is where muzzling could be enforced if during a hearing it was determined the dog in question is potentially dangerous, vicious or a nuisance. He said rather than imposing specific rules for enforcement, it is more practical to apply reasonable conditions on an individual basis. He said just because a dog is reported to bark continuously on three occasions, doesn't necessarily mean it should be muzzled.

On page 3 under *Potentially Dangerous Dog,* Councilmember Thompson suggested "two occasions within the prior 36 month period" be changed to a 24 month period. Chief Hill said he believed that the 36 month period was statute under prior case law but agreed to look into the matter. After further clarification by the City Manager, the Council agreed to leave the period at 36 months.

Councilmember Leonard expressed concern over 4th Amendment Rights in regard to entering private property to apprehend an animal. Chief Hill explained all officers will have training on 4th Amendment rights and said what the section of the ordinance says is that an officer can follow an animal into a yard; not follow the animal into the home.

Councilmember Thompson then referred to page 11 *Limitations,* and the information he presented from a legal web site regulating the number of pets and said State and local governments can definitely restrict the number of pets within multi-unit structures.

Chief Hill stated the reason he stated that it is unlawful for any person to own or harbor or maintain at any parcel, more than three dogs or cats older than four months of age was to discourage residences containing a mother-in-law unit of having eight dogs. He suggested the language be changed to read "per dwelling unit."

City Manager suggested it be revised to read "no more than three dogs can be maintained in one dwelling unit."

Chief Hill stated that the planning commission recommended the number of dogs and cats be changed from three dogs and three cats to three dogs and five cats.

Councilmember Thompson suggested there be a coalition between a person's income and the number of dogs they are allowed to have.

Chief Hill stated he was not comfortable with officers asking for income information and said that provided the animals are well cared for, the choice should be up to the individual as to whether they have one or three dogs. He commented that the California Penal Code Section 597 addresses animal cruelty.

Councilmember Thompson pointed out that the County of Humboldt charges more for the second animal license.

Consensus of the Council was that the number of animals per dwelling unit be limited to three dogs and three cats.

Mayor Woodall asked if the City charges a fee for voluntarily surrendering an animal; Chief Hill stated there is currently a $18.00 fee for relinquishing an animal however on occasion the fee has been waived in the interest of the animals welfare.

Councilmember Thompson referred to page 27 under 1(a) and stated that the $100,000 requirement for liability insurance for dogs determined to be vicious seems low.

Consensus of the Council was that the amount of liability insurance in regard to vicious dogs be increased to $300,000.

Chief Hill referred to the last page of the draft ordinance and said he would include in this section a reference to the Fish and Game code in regard to exotic animals and stated there is a special permitting process required through the State to have an exotic animal. He said he would also address the issue of service animals.

In closing, Chief Hill said he would make the recommended revisions to the draft ordinance, forward to the City Attorney for review, then come back to the planning commission and council with a fee schedule and first reading of the ordinance in March.

The study session ended at 6:20 p.m. and Mayor Woodall called for a 10 minutes recess.

The meeting reconvened at 6:30 p.m.

CEREMONIAL

Proactive Policing Award to Officer Harralson
Mayor Woodall presented to Officer Kevin Harralson, the Proactive Policing Award for his performance over the past twelve months leading the police department in total arrests, felony arrests, and drug related arrests.

PUBLIC PRESENTATIONS

Carol Theuriet, Pacific Ave. resident, addressed the Council on behalf of low income and senior residents regarding water and sewer rates. She referred to the recent increases and urged the Council to reconsider implementing the annual 3% increase which occurs in July and to consider a possible increase of 1%. She said in light of the current economic times, she was begging the Council to reconsider the rate increase and said she intended to campaign against the 3% raise in July.

Deborah Bare, Berkeley St. resident, stated back in September she had received an Income Survey from the City and asked what the status was of that survey and if there will be grant money available to improve housing. Community Development Director Caldwell stated the Income survey was sent out to residents in anticipation of the City receiving grant funding however, under the new State CDBG Program Guidelines, grants are awarded based on targeted income areas. He said there are 3% interest rehab loans available for owner occupied properties up to $100,000 for qualified applicants. He invited Ms. Bare to stop by City Hall and discuss the program with him if she was interested.

Brett Whittener from Humboldt Waste Management Authority (HWMA) addressed the Council regarding possible implementation of a Plastic Bag Ban Ordinance. He said he was tasked with developing a model ordinance including updating each member agency on what HWMA is doing. He explained the project is driven by the HWMA Board and staff is being directed by the County Board of Supervisors and the Arcata City Council to develop a single use bag ban ordinance and the necessary CEQA supporting documentation. He said his interest is to protect the member agencies from litigious liability and to meet the requests of those agencies. He said he would be asking each of the six agencies what adverse impact film plastics are having on their

community and noted there was a large difference in the approach of what the three smaller jurisdictions wanted from that of the three larger jurisdictions. He said another question to consider is what type of bags should be banned and where and whether to restrict or ban single use paper and plastic, charge for recycling, allow or sell reusable bags, and determine what if any exemptions there would be. He commented that HWMA staff does not have the time to develop CEQA documents but would proceed with putting together a model ordinance for consideration.

Council consensus was to bring the matter back at the March 6, 2012 regular meeting.

Vanessa Vasquez from Humboldt Baykeeper & Surfrider addressed the Council and stated she thinks the plastic bag ban ordinance is important because of the threat plastic bags have on the environment. She said there are plenty of sustainable alternatives to consider and stated she would be attending the March 6, 2012 regular meeting as well.

Richard Newman, Second Ave. resident commented that he saw one of the police officers patrolling by bicycle and said he was in support of the idea.

CONSENT CALENDAR

Mayor Woodall announced the items to be approved on the consent calendar and asked the staff, the public and the Council members if there was anyone who wished to have any item removed from the consent calendar for separate discussion.

Councilmember Wilson asked that Item 4, *Wildwood Avenue Streetscape Consultant Agreement with GHD Engineering,* be removed from the consent calendar and placed under *Special Call Items* for separate discussion.

Motion was made by Leonard/Thompson to approve the consent calendar including approval of minutes of the February 7, 2012 regular meeting; approval of minutes of the February 16, 2012 special meeting; and approval of the purchase of meter reading equipment for an amount not to exceed $5,910.55. Motion carried 4-0.

SPECIAL CALL ITEMS/COMMUNITY AFFAIRS

Approve Wildwood Avenue Streetscape Consultant /Agreement with GHD Engineering
Councilmember Wilson announced he was involved in a sub-contract as a software consultant with the City of Trinidad and GHD therefore wised to recuse himself from voting on this item.

Motion was made by Leonard/Thompson to approve the Wildwood Avenue Streetscape Consultant Agreement with GHD Engineering. Motion carried 3-0; 1 abstain.

Draft Cross Connection Control Ordinance
Water Superintendent Jensen reported what is before the Council is the Draft Cross Connection Control Ordinance for review purposes only. He stated the matter would be back at the March 6, 2012 regular meeting for further review and comment by the Council.

Chief of Police Hill and Water Superintendent Jensen were excused from the remainder of the meeting.

Approve Distribution of City's RFP's for Auditing Services for FY Ending June 30, 2012 and Appoint two (2) Members of the City Council to Serve on Selection Committee with City Manager and Finance Director
Finance Director Beauchaine reported at the request of the City Council, she prepared an RFP to procure auditing services from a new independent auditing firm for the City's annual financial audit. She said the City has engaged the services of Mann, Urrutia, and Nelson CPA's since 2006 and the US Government Finance Officers Association recommends that auditors be contracted for a maximum of five years.

In addition, she said she proposed the formation of a selection recommendation committee consisting of the City Manager, Finance Director and two (2) members of the Council to review and make recommendation to the Council on how to proceed.

Councilmembers Leonard and Thompson volunteered to serve on the committee.

Motion was made by Wilson/Leonard to approve distribution of the City's RFP's for auditing services for FY ending June 30, 2012 and appointment of Councilmembers Leonard and Thompson to serve on the Selection Recommendation Committee with the City Manager and Finance Director. Motion carried 4-0.

ORDINANCES/SPECIAL RESOLUTIONS

Approve Resolution No. 1142-2012 Amending Resolution No. 998-2008 Relating to the Establishment of Water Deposit and Water Reconnection Fees
City Manager Henrickson stated this item was discussed at the last regular meeting and relates to write-offs related to non-payment of water bills. He said part of the problem is that the current water deposit of $40.00 is exceedingly low. Another problem has to do with the number of monthly water turn-offs for non-payment of water bills. The current reconnection fee is $35.00 plus actual costs during regular business hours and $75.00 plus actual costs for after hours. With passage of the resolution, water deposits for all new customers will be increased to $100.00 and in regard to reconnection fees, the fee will be $40.00 for the first reconnect; $60.00 for the second reconnect and $100.000 for all subsequent reconnects. He said the idea is that the increased fee will serve as a deterrent since many customers are repeat offenders.

A public hearing was opened at 6:54 p.m. to receive public input on the proposed resolution.

Sharon Wolfe pointed out for the benefit of the public that the sewer deposit would also be increasing; making the total water/sewer deposit at $300.00. She asked if there were any provisions for Section 8 residents; City Manager Henrickson stated the deposit would apply to all new customers regardless of income.

Deborah Bare expressed concern over the current water and sewer rates and said with the proposed increase she didn't see how citizens could afford it. She suggested water deposits and reconnection fees not be increased.

City Manager Henrickson noted that the City's water deposit is outrageously low at $30.00 and said the City of Eureka's is currently $60.00 and the City of Arcata's $185.00.

Deborah Bare suggested there be a reward system established whereby the deposit is returned to the customer after one year with a good payment record.

Carol Theuriet stated she understood the City was mandated by the State to do certain upgrades to the water and sewer system but said she was appealing to the Council on behalf of the community to reconsider any increased charges. She said the income level for Rio Dell residents is much lower than the larger cities yet the rates continue to go up. She asked what the percentage is for delinquent accounts and how many of those customers that have water turned off for non-payment are repeat offenders; Finance Director Beauchaine stated the delinquency rate is about 10% but she was uncertain about the number of repeated turn-offs.

City Manager Henrickson commented that the City Council has very little discretion in regard to water and sewer rates since the State mandates that rates be established based on the cost of supplying the service. In order to qualify for the $5 million wastewater grant the City had to show that the rates were where they should be.

Carol Theuriet then commented that if the rates go up too much people will simply move away.

City Manager Henrickson said staff was still exploring the possibility of establishing a consumption based sewer rate which will reduce bills for minimum water users.

Mayor Woodall pointed out that the City cannot make a profit in regard to enterprise funds and unfortunately rate increases were deferred for a lot of years and the problem now is that the city has to make up for years there were no increases.

Carol Theuriet asked for an explanation of consumption based sewer rates; City Manager Henrickson explained those customers who use minimal water would be billed less than those high users and basically it re-distributes sewer revenue rather than increasing it.

There being no further public comment, the public hearing closed at 7:03 p.m.

Motion was made by Leonard/Thompson to approve *Resolution No. 1142-2012 Amending Resolution No. 998-2008 Relating to the Establishment of Water Deposit and Water Reconnection Fees.* Motion carried 4-0.

Conduct Second Reading (by title only) and Approve Ordinance No. 283-2012 Establishing Lot Size Modification Regulations, Section 17.30.130 of the Rio Dell Municipal Code (RDMC)
Community Development Director Caldwell reported the proposed ordinance was introduced at the February 7, 2012 regular meeting and is back now for its second reading (by title only) and adoption.

A public hearing was opened at 7:10 p.m. to receive public comment on the proposed ordinance. There being no public comment, the public hearing closed.

Motion was made by Wilson/Leonard to conduct the second reading (by title only) and approve *Ordinance No. 283-2012 Establishing Lot Size Modification Regulations, Section 17.30.130 of the Rio Dell Municipal Code (RDMC).* Motion carried 4-0.

Conduct Second Reading (by title only) and Approve Ordinance No. 284-2012 Amending Yard Regulations, Section 17.30.280 of the Rio Dell Municipal Code (RDMC)
Community Development Director Caldwell stated this item was also introduced and discussed at the February 7, 2012 regular meeting and is back for a second reading (by title only) and adoption. He explained the proposed ordinance encompasses two changes. First it allows for average front yard setback of improved lots on the same block, meaning that if the average front yard setback on the block is less than the standard 20 foot front yard setback, a property owner would be able to place a new development based on the average setback.

Community Development Director Caldwell stated the second issue relates to setbacks on corner lots which was also omitted from the current zoning regulations. The recommended language states that in any residential zone, the side yard of a corner lot shall be equal to the front yard setback if any part of the main building is within 25 feet of the rear lot line or one-half the front yard setback if all parts of the main building are more than 25 feet from the rear lot line.

A public hearing was opened at 7:12 p.m. to receive public input on the proposed ordinance. There being no public comment, the public hearing closed.

Motion was made by Thompson/Leonard to conduct the second reading (by title only) and approve *Ordinance No. 284-2012 Amending Yard Regulations, Section 17.30.280 of the Rio Dell Municipal Code (RDMC).* Motion carried 4-0.

Conduct Second Reading (by title only) and Approve Ordinance No. 285-2012 Calling a Special Election and Ordering the Submission of a Proposition of Incurring Bonded Debt for the Purpose of the Construction and Completion of Street Improvements to the Qualified Voters of the City of Rio Dell at the Special Municipal Election to be Held June 5, 2012
City Manager Henrickson stated the ordinance is part of the process to place the bond measure on the ballot for the June 5, 2012 primary election.

He reiterated information presented at the last meeting and stated a 5 page mailing will be going out to all residents explaining the proposed bond measure relating to the street improvements. He said the decision to proceed with the project will be at the discretion of the voters since it will require a 66% voter approval.

A public hearing was opened at 7:16 p.m. to receive public input on the proposed ordinance. There being no public comment, the public hearing closed.

Councilmember Wilson reiterated the need for improved streets and that it is ultimately up to the voters to decide if they want the improvements.

Councilmember Leonard commented that we are still living with what the County gave us in 1965 when the City was incorporated and said the improvements are badly needed.

Motion was made by Wilson/Leonard to conduct second reading (by title only) and approve *Ordinance No. 285-2012 Calling a Special Election and Ordering the Submission of a Proposition of Incurring Bonded Debt for the Purpose of the Construction and Completion of Street Improvements to the Qualified Voters of the City of Rio Dell at the Special Municipal Election to be Held on June 5, 2012.* Motion carried 4-0.

Approve Resolution No. 1146-2012 Supporting Endorsing an Application for a Safe Routes to School Grant to Enhance the Safety of Pedestrian and Bicycle Facilities to Monument Middle School and Eagle Prairie Elementary
City Manager Henrickson noted that this grant requires a 10% local match and although the City can request a maximum of $450,000 for a total project cost of $500,000, the City cannot afford $45,000. He said a reasonable request would be $100,000 with a $10,000 match.

Community Development Director Caldwell further reported that California Department of Transportation (Cal-Trans) announced $45 million was targeted to be funded from the 2011-12 State Budget Act and the projected funding from the 2012/13 State Budget under the Safe Routes 2 School (SR2S) Program funding. He said funding is for projects that improve safety for children in grades K-12 who walk or bicycle to school. He stated that he was working with GHD Engineering to prepare an application for grant funding.

A meeting was held at the Rio Dell School where priorities were identified as follows:

- Flashing LED crossing sign at the intersection of Center Street and Wildwood Ave.
- Improvements to the intersection of Second Avenue and Davis Street
- Flashing LED crossing sign just west of the intersection of Fourth Ave. and Davis
- Completion of sidewalks along Davis Street
- Bike lanes along the eastern end of Belleview Avenue

Community Development Director Caldwell said GHD is preparing the application, preliminary plans and cost estimate and when the information is available he will bring it back to the Council for review and comment. He said the resolution is needed to endorse the application for the grant.

A public hearing was opened at 7:25 p.m. to receive public input on the proposed resolution.

Deborah Bare asked if there were plans to install additional street lights and bike lanes; Community Development Director Caldwell said included in the proposal is to install a bike lane along a portion of Belleview only however said there will be more public meetings where citizens are encouraged to attend and comment. He said the cost estimates will determine how much can be done.

Deborah Bare asked if fund raisers could be done to raise more money to help fund the improvements; Community Development Director Caldwell said they could be although it would be through a separate process stating the deadline for submittal of the application is March 30, 2012.

There being no further public comment, the public hearing closed at 7:27 p.m.

Councilmember Wilson stated he would recuse himself from voting on this item for the same reason as stated before.

Motion was made by Thompson/Leonard to approve Resolution No. 1146-2012 *Supporting Endorsing an Application for a Safe Routes to School Grant to Enhance the Safety of Pedestrian and Bicycle Facilities to Monument Middle School and Eagle Prairie Elementary.* Motion carried 3-0; 1 abstain.

REPORTS/STAFF COMMUNICATIONS

City Manager Henrickson stated he had nothing further to report at this time.

Finance Director Beauchaine stated she had nothing to report at this time.

Community Development Director Caldwell reported on recent activities in the planning department and stated he and Chief Hill would be attending a free Emergency Management

Agency Post Disaster Site Inspection Training on March 1, 2012 and invited any interested Council members to attend.

COUNCIL REPORTS/COMMUNICATIONS

Councilmember Thompson reported that HWMA offered to mediate for a cost neutral solution in regard to the Samoa Facility with removal of the lawsuit and he was informed today that they would be calling for a closed session on the subject without regard to the revenue neutral option.

ADJOURNMENT

There being no further business to discuss, the meeting adjourned at 7:30 p.m. to the March 6, 2012 regular meeting.

_____
Julie Woodall, Mayor

Attest:

_____
Karen Dunham, City Clerk

675 Wildwood Avenue
Rio Dell, CA 95562
(707) 764-3532

TO: Honorable Rio Dell City Council

FROM: Ron Henrickson, City Manager

DATE: March 6, 2012

SUBJECT: Plastic Bag Ban Proposed by HWMA

ATTACHMENT: Humboldt Waste Management Authority (HWMA) Staff Report – January 12, 2012

Council Action:

A. By motion move to express the City Council's support of HWMA's initiative to formulate a tiered model ordnance banning plastic bags.

B. By motion move to express the City Council's recommendation to HWMA to postpone any expenditure on formulation of a tiered model ordnance banning plastic bags until either State wide legislation is adopted or a clear legal precedent exists to support such a ban.

C. By motion move to express the City Council's recommendation to HWMA to cease expenditure of funds to formulate a tiered model ordnance banning plastic bags.

D. Take no action.

Background:

In 2008 the issue of a ban on plastic bags in Humboldt County was discussed by the County and HWMA and it was concluded to postpone consideration until a number of lawsuits brought against cities and counties that had enacted such bans

were resolved. Some of those cases have been resolved and others are under appeal.

As noted in the HWMA staff report attached the HWMA board has directed staff to once again explore the issue.

The difficulty with proceeding with any type of ban is that the Save the Plastic Bag Coalition is most likely to legally challenge it. To support such a ban environmentally it is proposed that HWMA spend between $55,000 and $100,000 to prepare CEQA documents.

What is not mentioned in the staff report is what the legal cost might be in defending the ban if the appeal process went as far as the California Supreme Court. Also not stated in the staff report is how much time and expense would be incurred by HWMA administrating both the formulation of an ordinance and its defense.

No mention in the staff report is made of alternative strategies to address the use of plastic bags such as user education. Note that only the cities and county can actually adopt a ban on plastic bags. If challenged I presume the legal cost to defend would fall on the city or county and not HWMA.

City Manager recommendation: At the Council's discretion.

HUMBOLDT WASTE
MANAGEMENT AUTHORITY

Staff Report

DATE: January 12, 2012

FROM: Patrick Owen, Executive Director (Interim)

SUBJECT: Item 7
Model Single-Use Plastic Bag Ordinance

RECOMMENDED ACTION: Voice vote.
Receive Update on Development of a Model Single-Use Plastic Bag Ordinance and Provide Additional Direction to Staff

DISCUSSION:
The Board directed HWMA staff to begin developing a model ordinance to ban single-use bags for adoption by our member agencies, along with the supporting environmental documents, at the April 14, 2011 board meeting by a vote of 6 to 0. The staff report from the April 2011 meeting (attached) gave background information on local plastic bag bans throughout California, and proposed that HWMA develop model ordinance language in-house and retain an outside consultant to prepare in draft the necessary California Environmental Quality Act (CEQA) documents. Cost estimates from local planning consultants were between $55,000 and $100,000 for the preparation of a full Environmental Impact Report (EIR). This lengthy, more conservative and costly CEQA approach was proposed in April 2011 because at that time the plastic industry had successfully challenged the City of Manhattan Beach in its adoption of a bag use ordinance on grounds that CEQA required preparation of a full EIR of the impacts from such a ban rather than a negative declaration that environmental impacts would be less than significant.

Within a month after receiving Board direction, staff had prepared model ordinance language drafts and a draft RFP soliciting a CEQA consultant. However, staff chose not to release an early-stage model ordinance or a RFP for a CEQA consultant, instead hoping the California Supreme Court would clarify whether adoption of an ordinance banning single-use bags would require a full EIR, or, alternatively, could be adopted subject to a negative declaration. Simply stated, negative declarations typically cost far less to complete than full Environmental Impact Reports. Although the July 2011 California Supreme Court ruling in the City of Manhattan Beach case found that the Manhattan Beach ordinance could be adopted with a negative declaration, the ruling was limited in its scope to the specifically anticipated environmental impacts from the Manhattan Beach ordinance as disclosed in an initial study.

Separately, in January 2011, the County of Marin adopted an ordinance banning the use of single-use plastic bags based on a determination that the ordinance adoption was categorically exempt from CEQA review. Although the use of this exemption was upheld by the trial court when challenged by the plastic bag industry, the Save the Plastic Bag Coalition has appealed the decision to the intermediate California Court of Appeal.

Additional relevant litigation is as follows:

- In October 2011, a lawsuit was initiated against the County of Los Angeles by a film plastics manufacturer on grounds that the County's bag ordinance requirement of a fee for paper bags violates Proposition 26, which mandates voter approval of some fees and charges.

- The City of San Francisco, the first city in the nation to adopt a ban on plastic single use bags, recently initiated changes to its 2007 plastic bag ordinance language to expand its application to all retailers and restaurants and to include a minimum charge on paper bags provided at the register. The City was served a notice of intent to litigate by the Save the Plastic Bags Coalition on arguments ranging from State food code violations to constitutional issues.

The timetable for court examination of core issues and appeals appears lengthy. HWMA staff is looking for additional input from the Board regarding our direction to take from this point forward. While it would be quicker and less costly to make Categorical Exemption findings similar to those made by Marin County, staff believes that development of a model ordinance using that tactic would not be prudent. By taking the riskier path, HWMA could be exposing its member agencies that choose to adopt such a model ordinance to unnecessary legal challenges, resulting in withdrawal of the ordinances or high cost legal defenses. HWMA legal and administrative staff is striving to define the model ordinance and associated CEQA requirements relating to this project, with careful consideration of each jurisdiction's needs. For example, a specific Categorical Exemption or Negative Declaration may be appropriate for a small member agency, where a larger population base would drive another agency to call for preparation of a complete EIR.

Staff recommends commencing a CEQA Initial Study. This will allow us to make the determination whether to pursue a CEQA Negative Declaration or a full EIR. However, staff seeks Board direction in developing a specific project description for CEQA analysis – we have six member jurisdictions, who may not all wish to pursue the same exact local bag ordinance. For example, staff sees multiple ordinance options: a ban on all single-use carryout bags, including paper bags; a ban on single-use plastic carryout bags while requiring a fee (e.g. 10 cents) for paper bags (with or without a given minimum post-consumer recycled content); limiting the bag ordinance to larger retailers (as measured by gross annual sales or square footage), or the granddaddy of all bans – no single-use bags of any kind, including those for produce and meat.

Staff proposes that we consult with each member agency to determine the components of a plastic bag ban that the agency is interested in adopting. A successful end product will be the creation of a draft model ordinance together with its supporting CEQA document to be used for adoption by the individual member agency if it so chooses.

Budget Impacts:

The current fiscal year 2011/12 budget does not include an allocation for the cost of a private consultant to prepare environmental documents for a model plastic bag ordinance. It is believed that an initial study would cost somewhere around $20,000, with additional costs to complete a Negative Declaration or full EIR.

675 Wildwood Avenue

Rio Dell, CA 95562

(707) 764-3532

TO: Honorable Rio Dell City Council

FROM: Ron Henrickson, City Manager

DATE: March 6, 2012

SUBJECT: WWTP Upgrade and Disposal Project Bid Award

ATTACHMENT: Bid Opening Tally

Council Action:

A. By motion move to award the bid to the lowest responsive and responsible bidder Wahlund Construction, Inc. / Sequoia Construction Specialties, Joint Venture (Wahlund) and authorize the City Manager to execute contract documents.

B. Take no action.

Background:

On August 16, 2011, the City received five bids for construction of the WWTP Upgrade and Disposal Project. The bid tally is attached. On September 6, 2011, the City Council approved Resolution No. 1128-2011 Rejecting Mercer-Fraser Company's bid as non-responsive. Wahlund's bid was extended in writing from November 15, 2011 to January 15, 2012 and from January 15, 2012 to April 17, 2012.

On February 9, 2012 the City entered into financing agreement with the State Water Resources Control Board to fund the project.

City Manager recommendation: Approve bid award to Wahlund.

CITY OF RIO DELL - WWTP UPGRADE AND DISPOSAL PROJECT

August 16, 2011 - Preliminary Bid Results Summary

	Auburn Constructors, Inc.	Mercer-Fraser Company	Western Water Constructors, Inc.	Wahlund/Sequoia Joint Venture	K.G. Walters Construction	Engineers Estimate
Caltrans Confidentiality Agreement has been executed	x	x	x	x	x	
Acknowledgement of each Addendum issued	x	x	x	x	x	
Bid Form Section 00301	x	x	x	x	x	
Bid Security (Bid Bond)	x	x	x	x	x	
Subcontractor Listing	x	x	x	x	x	
Equipment Listing	x	x[1]	x	x	x	
Contractor Qualification Statement	x	x	x	x	x	
Disadvantaged Business Enterprise (DBE) documentation including EPA Forms 6100-3 (per Compliance Guidelines for CWSRF)	x	x[2]	x[2]	x	x	
Disadvantaged Business Enterprise (DBE) documentation including EPA Forms 6100-4 (per Compliance Guidelines for CWSRF)	x	x[3]		x	x	
Bid Item No. 1	$10,300	$50,000	$10,000	$5,000	$20,000	
Bid Item No. 2	$180,000	$55,000	$62,500	$87,500	$70,000	
Bid Item No. 3	$1,225,000	$1,150,000	$1,143,000	$1,080,000	$1,160,000	
Bid Item No. 4	$1,650,000	$1,600,000	$1,262,800	$1,500,000	$1,700,000	
Bid Item No. 5	$1,000,000	$610,000	$1,458,600	$795,000	$800,000	
Bid Item No 6	$10,000	$15,000	$39,000	$70,000	$15,000	
Bid Item No. 7	$50,000	$15,000	$55,900	$10,500	$45,000	
Bid Item No. 8	$6,880,000	$6,374,000	$7,336,200	$6,420,000	$6,764,900	
Bid Item No. 9	$577,000	$630,000	$746,400	$663,000	$588,000	
Project Total Bid Price	$11,582,300	$10,499,000	$12,114,400	$10,631,000	$11,162,900	$11,200,000

Listed Subcontractor, Location, & Work Description	Auburn Constructors, Inc.	Mercer-Fraser Company	Western Water Constructors, Inc.	Wahlund/Sequoia Joint Venture	K.G. Walters Construction
Hooven & Co., McKinleyville, CA - Paving and Earthwork	$620,000		-	-	$260,000
Cat 4 U, Healdsberg, CA - Site Work			$925,000[4]		
Traffic Solutions, Arcata, CA - Traffic Control					$110,000
Selby Erosion Control, Newcastle, CA - Hydroseeding				$51,000	
M&S Environmental Landscapes, Inc., Redding, CA - Hydroseeding	$70,000[5]				$70,200
Cal Kirk Landscaping - Erosion Control		$62,100[4]			
O&M Industries, Arcada, CA - Misc. Metals and Equipment Installation	$575,000			$712,000	
GR Sunberg Inc., Arcata, CA - Paving				$36,464	
Maples Plumbing, Eureka, CA - Plumbing		$374,455[4]		$370,000	
Design Air, Eureka, CA - HVAC			$92,000[4]		
Munson Pump Services, Cottonwood, CA - Bypass Pumping Assistance				$32,200	
Crawford Construction, Eureka, CA - Building		$273,780[4]	$60,000[4]		
Hanson Painting, Sacramento, CA - Painting	$66,800		$68,000[4]		$66,758
SJR Masonry, McKinleyville, CA - CMU Block				$19,000	
Cumblin Steel Services, Sacramento, CA - Rebar	$610,000	$610,000[4]	$610,000[4]	$610,000	$610,000
Penhall Co., Santa Clara, CA - Coring/Demolition	$93,400	$93,300[4]	$65,000[4]	$65,000	$93,400
West Coast Boring, Bakersfield, CA - Bore & Jack			$233,000[4]		
Solid Rock Construction, Redding, CA - HDD	$1,350,000		$780,000[4]	$600,000	$900,000
Redwood Electric, Eureka, CA - Electrical		$745,132.45[4]			
Auburn Constructors, Sacramento, CA - Electrical			$937,000[4]		
Parker Electric, Eureka, CA - Electrical				$800,000	$800,272

Notes:

1. Equipment listing did not specify an Indirect Sludge Dryer System.
2. EPA Form 6100-3 not filled out. Form submitted blank or not submitted.
3. EPA Form 6100-4 was signed and dated by prime contractor, but subcontractor names (DBE and non-DBE), addresses, phone numbers, email addresses, type of work to be performed, estimated dollar amounts and MBE/DBE certified were not filled out.
4. EPA Form 6100-4 not completed for listed subcontractor. See notes 2 and 3 above as applicable.
5. EPA Form 6100-3 did not specify if M & S Environmental Landscaping, Inc. is certified as an MBE or WBE under EPA's DBE program. M&S Environmental is not a DBE under K.G. Walters bid.

675 Wildwood Avenue
Rio Dell, CA 95562
(707) 764-3532

TO: Honorable Rio Dell City Council

FROM: Ron Henrickson, City Manager

DATE: March 6, 2012

SUBJECT: Wastewater Project #2 Agreement for Testing Services

ATTACHMENTS: - Engineering Service Agreement for Construction Testing and Inspection – Laco Associates
- Laco Associates Proposal
- SHN Proposal

Council Action:

By motion move to approve Laco Associates Engineering Service Agreement for Construction Testing and Inspection in an amount not to exceed $41,030.25 and authorize the City Manager to execute the agreement.

Background:

In anticipation of awarding a construction contract for the Wastewater Project #2 the City solicited bids for testing services in March 2011. Unfortunately, due to many reasons the award of the construction contract has been delayed, but is now proceeding. The City received two proposals: LACO Associates and SHN. After review it is recommended that the City enter into an agreement with LACO Associates.

Both LACO Associates and SHN have performed work for the City in the past and both firms are capable. LACO Associates proposal enables the City to enter into a stipulated price agreement.

Financial Impact:

The cost of testing services is a project cost to be funded by a loan through the State Revolving Fund.

City Manager Recommendation:

Approve the Laco Associates Agreement. The Agreement has been reviewed by the City Attorney.

LACO ASSOCIATES
ENGINEERS - GEOLOGISTS - ENVIRONMENTAL CONSULTANTS

PROJECT NO. 7448.00

ENGINEERING SERVICE AGREEMENT for Construction Testing and Inspection Services
City of Rio Dell, referred to as "CLIENT", requests, and LACO Associates, referred to as "LACO" agree to provide engineering services for the following project:

Project Name: Rio Dell Wastewater T&I

Project Location: Rio Dell, California

Description and Scope of Services to Be Provided
- Please refer to the attached Exhibit A dated September 14, 2011.

Description and Scope of Services Not Provided
- Please refer to the attached Exhibit A dated September 14, 2011.

Special Conditions and / or Assumptions
- Please refer to the attached Exhibit A dated September 14, 2011.

Estimated Date of Completion
- September 30, 2013

Prevailing Wage rates **do** apply to this project.

Payment Terms: Net 30

CLIENT agrees to pay at the hourly rates and to pay all other costs for the work or portion of work performed as set forth in the "SCHEDULE OF RATES" attached and made a part of this Agreement. These rates are subject to periodic revision, of which written advance notice will be provided. The time and material based estimated fee is: **$41,030.**

A retainer of 50 percent of the estimated fee is **$waived**.

This agreement includes the following attachments: GENERAL CONDITIONS, labeled GEN2007, Schedule of Rates, and others (if any) noted above.

This agreement is entered into this 3rd day of October, 2011, Eureka, Humboldt County, California.

SIGNED _____

LACO Associates
PO Box 1023
Eureka, CA 95502
(707) 443-5054
(707) 443-0553 Fx
Principal: Leonard M. Osborne
PM: Dale L. Romanini

RECEIVED ON ACCOUNT _____

SIGNED _____

DATE _____

CLIENT: City of Rio Dell
Ron Hendrickson

Address: 675 Wildwood Avenue
Rio Dell, CA 95562
Phone No.: 707-764-3532
Fax No.:
Email:

GENERAL CONDITIONS

LACO will perform only those services outlined in the agreed scope of work, except that CLIENT and LACO may subsequently agree in writing to provide for additional services to be rendered under this agreement for additional, negotiated compensation.

CLIENT has relied on LACO's judgement in establishing the workscope and fee for this project, given the project's nature and risks. CLIENT shall, therefore, rely on LACO's judgement as to the continued adequacy of this Agreement in light of occurrences or discoveries not originally contemplated or known. Should LACO call for contract renegotiation, LACO shall identify the changed conditions which, in LACO's judgement, make such renegotiation necessary, and LACO and CLIENT shall promptly and in good faith enter into renegotiation of this Agreement to help permit LACO to continue to meet CLIENT's needs. If renegotiated terms cannot be agreed to, CLIENT agrees that LACO has an absolute right to terminate this Agreement.

LACO agrees to strive to perform the services set forth in this Agreement in accordance with generally accepted professional practices, in the same or similar localities, related to the nature of the work accomplished, at the time the services are performed. LACO's services shall not be subject to any expressed or implied warranties whatsoever.

Invoices may be submitted to CLIENT as frequently as every four (4) weeks and/or upon completion of the work and are due and payable when presented. All accounts not paid in full within agreed payment terms will include a late payment charge from the date of the invoice, at the rate of 1.5% per month. If legal action is instituted on this account, the prevailing party shall be awarded such attorney's fees and other costs as the Court may adjudge to be reasonable.

If CLIENT for any reason fails to pay the undisputed portion of LACO's invoices fifteen (15) days after invoice due date, LACO has the right to cease work on the project, and CLIENT agrees to waive any claim against LACO for cessation of services, and shall defend and indemnify LACO from and against any claims for injury or loss stemming from LACO's cessation of service. CLIENT agrees to also pay LACO the cost associated with premature project demobilization. In the event the project is remobilized, CLIENT agrees to also pay the cost of remobilization, and shall renegotiate appropriate contract terms and conditions, such as those associated with budget, schedule, or scope of service.

In the event any bill or portion thereof is disputed by CLIENT, CLIENT shall notify LACO within ten (10) days of receipt of the bill in question, and CLIENT and LACO shall work together to resolve the matter within sixty (60) days of its being called to the attention of LACO. If resolution of the matter is not attained within sixty (60) days, either party may terminate this Agreement in accordance with condition contained herein.

In recognition of the inherent risk of claims associated with the services to be provided and in consideration of our Agreement to perform these services, CLIENT agrees to limit LACO's liability for CLIENT and any third parties arising from LACO's professional acts, errors or omissions, such that the total aggregate liability of engineer to all those named shall not exceed **$50,000** or LACO's total fee for services rendered on this project, whichever is greater. (If CLIENT wishes to discuss higher limits and charges involved, he should speak with LACO.) CLIENT further agrees to require of any contractors or subcontractors an identical limitation of LACO's liability for damages suffered by the contractor or subcontractor arising from LACO's professional acts, errors, or omissions. Neither the contractor, nor any of his subcontractors assumes any liability for damages to others which may arise on account of LACO's professional acts, errors or omissions except as otherwise stipulated herein. Limitations on liability and indemnities in this Agreement are business understandings between the parties, voluntarily and knowingly entered into, and shall apply to all theories of recovery, including but not limited to, breach of contract, warranty, tort (including negligence), strict or statutory liability, or any other cause of action, except for willful misconduct or gross negligence.

Both CLIENT and LACO agree that, to the extent allowed by law, they will not be liable to each other for special, indirect, or consequential damages arising out of or related to this Agreement, whether caused by negligence, errors, omissions, strict liability, breach of contract, breach of warranty or other cause or causes whatsoever.

By this Agreement, LACO specifically excludes, disclaims and is discharged from any responsibility or liability for all direct or indirect loss or harm resulting from the presence, failure to discover, interception, escape or discharge of hazardous or toxic materials of any kind, including the contamination of soil, water, air or other property as a result thereof. This exclusion included, but is not limited to, exploration, testing, analysis, or recommendations by LACO.

LACO's scope of work does not include the investigation or detection of the presence of any Biological Pollutants in or around any structure. CLIENT agrees that LACO will have no liability for any claim regarding bodily injury or property damage alleged to arise from or be caused by the presence of or exposure to any Biological Pollutants in or around any structure. In addition, CLIENT will defend, indemnify, and hold harmless LACO from any third party claim for damages alleged to arise from or be caused by the presence of or exposure to any Biological Pollutants in or around any structure, except for damages arising from or caused by LACO's sole negligence. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

CLIENT waives any claim against LACO and agrees to defend, indemnify and hold LACO harmless for injury or loss which may arise as a result of (1) alleged cross-contamination of aquifers caused by sampling, (2) release of pollutants to the environment, (3) drill cuttings, fluids or other presumed hazardous materials being left on-site after containerization by LACO, (4) containing, labeling, transporting, testing, storing, or other handling of contaminated samples, (5) any work, error, omission or negligent act performed by contractors or others not under complete and direct supervision by LACO for the specific task required.

CLIENT is responsible for accurately delineating the locations of all underground structures and utilities. LACO will take reasonable precautions to avoid known subterranean structures, and CLIENT agrees to defend, indemnify and hold LACO harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located.

In the absence of special arrangements, all uncontaminated samples of soil or rocks will be disposed of by LACO sixty (60) days after submission of our report. Soil, water, rock and/or other waste materials generated during work on the project site shall remain the sole property and responsibility of CLIENT. It is CLIENT's sole responsibility to arrange for lawful disposal of all waste materials. Soil, water, rock and/or other waste materials generated during LACO's work efforts on behalf of the CLIENT which may be contaminated with hazardous or toxic materials or potentially hazardous or toxic materials will be containerized on the site in approved containers at such times as they may be generated. Such materials may be required by law to be characterized and disposed of within a limited time frame. Arranging for disposal of hazardous or toxic materials or potentially hazardous or toxic materials is specifically excluded from the scope of LACO's services. Upon written request from the CLIENT, LACO may assist in coordinating or facilitating lawful disposal procedures by an appropriately-licensed contractor employed by the CLIENT. Regardless of any coordination or facilitation of disposal of hazardous or toxic materials or potentially hazardous or toxic materials by LACO on behalf of the CLIENT, CLIENT agrees to indemnify and hold harmless LACO from any claim of liability for injury, loss or environmental damage, including cost of defense, arising from any disposal of hazardous or toxic materials or potentially hazardous or toxic materials.

LACO and CLIENT agree that discovery of unanticipated hazardous or toxic materials constitutes a changed condition mandating renegotiation or termination of services. LACO agrees to notify CLIENT as soon as practically possible should unanticipated hazardous materials or suspected hazardous or toxic materials be encountered. CLIENT agrees to make any disclosures required by law to the appropriate governmental agencies. CLIENT and LACO also agree that discovery of hazardous materials may make it necessary for LACO to take immediate action to protect health and safety. CLIENT agrees to compensate LACO for all costs required for such action and other costs incident to such unanticipated discovery of hazardous or toxic materials.

CLIENT agrees that construction contractors, subcontractors or others not affiliated with LACO are solely responsible for safety at and near the project site. LACO will have no responsibility or liability for methods of work performance, supervision including selection of equipment, selection or direction of contractor's employees, or sequencing of construction other than that done by LACO's own employees. LACO will not be responsible for excavation safety, temporary slopes, shoring, underpinning, dewatering, or other construction activities of the contractor(s) and subcontractor(s).

Unless otherwise agreed, CLIENT will furnish right-of-entry on land for planned field operations. CLIENT will notify any and all possessors of the project site the CLIENT has granted LACO free access to the site. LACO will take reasonable precautions to minimize damage to the site, but it is understood by CLIENT that, in the normal course of work, some damage may occur and the correction of such damage is not part of the Agreement unless so specified in the proposal or scope of work.

All documents, reports, boring logs, field and survey notes, tracings, and other documents prepared by LACO as instruments of service shall remain the property of LACO. All designs, information, reports, or recommendations prepared or issued by LACO are for the sole use of the CLIENT for the specific project for which they are prepared. CLIENT agrees not to provide such materials to any person or organization unless the person or organization agrees in writing to be bound by the conditions of this Agreement. CLIENT agrees to save and hold LACO harmless from any liability arising from any use made by CLIENT or any other party outside the intent of this Agreement.

All claims, disputes, and other matters in controversy between LACO and CLIENT arising out of or in any way related to this Agreement will be submitted to "alternative dispute resolution" (ADR) before and as a condition precedent to other remedies provided by law. If and to the extent that CLIENT and LACO have agreed on methods for resolving such disputes, then such methods will be set forth in the "Alternative Dispute Resolution Agreement" which, if attached, is incorporated into and made a part of this Agreement. If no specific ADR procedures are set forth in this Agreement, then it shall be understood that the parties will submit disputes to mediation as a condition precedent to litigation.

If a dispute at law arises from matters related to the services provided under this Agreement and that dispute requires litigation instead of ADR as provided above, then: (1) the claim will be brought and tried in the judicial jurisdiction of the Court of the county where LACO's principal place of business is located and CLIENT waives the right to remove the action to any other county or judicial jurisdiction, and (2) the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorney's fees, and other claim-related expenses.

This Agreement may be terminated by either party upon ten (10) days written notice by certified mail, return receipt requested. If CLIENT elects to terminate this Agreement, CLIENT will be responsible for all charges, as computed under this Agreement, for work performed by LACO through the tenth day after mailing of the notice of termination.

The laws of the State of California will govern the validity of the terms, their interpretation and performance. If any of the provisions contained in this Agreement are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired. Limitations of liability and indemnities will survive termination of this Agreement for any cause.

EXHIBIT A

Scope and Fee Estimate
Specialty Testing and Inspection Services
Rio Dell Wastewater Facility and Transmission Pipeline Project
Rio Dell, California
LACO Project No. 7448.00
September 14, 2011

LACO Associates (LACO) is pleased to submit this scope and fee estimate for specialty testing and inspection services. Based upon our review of the Project Plans and Specifications, services provided will generally consist of soil and concrete laboratory testing, soil compaction testing, field concrete sampling and testing, structural steel bolting and welding as needed. The general Scope of Services will be provided on a time and materials basis. The actual cost of services will be determined by the contractor's construction schedule and construction techniques.

Laboratory and Field Testing Summary

- **Lab Testing of Soil Backfill Materials** - We have anticipated the utilization of both native materials and imported materials and have budgeted for maximum density curves for up to four structural backfill soil types. We have assumed that the contractor's submittals will include lab tests verifying suitability of proposed materials.

  Estimated fee of $810

- **Compaction Testing of Force Main** - We have assumed 25 site visits averaging three hours each. The number of site visits is based upon the linear feet of pipeline. It is assumed that the Contractor will utilize boring in lieu of open trench for pipe placement and test locations will be limited to the bore pits and/or short distances of open trench. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. We have anticipated site work will be completed on an intermittent basis over the course of the project.

  Estimated fee of $9,970

- **Compaction Testing of Tank Backfill** - We have assumed two site visits, averaging four hours each. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. We have anticipated site work will be completed intermittently over the course of the project.

  Estimated fee of $980

- **Compaction Testing of Existing Building Slab Infill** - We have assumed two site visits, of eight hours each. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. We have anticipated site work will be completed intermittently over the course of the project.

  Estimated fee of $1,860

- **Concrete Cylinder Lab Testing for Compressive Strength** - We have assumed 33 sets of concrete cylinders will be required to meet the project requirement of one set per 50 yards of structural concrete or fraction thereof. This is based on the expectation that the contractor will pour the main tank slab in two large pours and the remaining concrete work to be completed intermittently over the course of the project. Compressive strength testing of each set is inclusive of lab testing, engineer review of results, and distribution of results to the owner, design team, and the contractor.

  Estimated fee of $6,200

- **Concrete Field Sampling and Testing of Tank Slab** - We anticipate two site visits of eight hours for the main tank slab pour. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of concrete cylinders from each pour has been included.

  Estimated fee of $1,775

- **Concrete Field Sampling and Testing of Tank Walls** - We anticipate eight site visits of averaging five hours each for the tank wall pours. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of concrete cylinders from each pour has been included.

  Estimated fee of $4,795

- **Concrete Field Sampling and Testing of Bridge Pipe Pedestals** - We anticipate ten site visits of averaging three hours each for the bridge pedestal pours. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of concrete cylinders from each pour has been included.

  Estimated fee of $4,295

- **Concrete Field Sampling and Testing of Miscellaneous Structures** - We anticipate three site visits of averaging three hours each for miscellaneous structures. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of concrete cylinders from each pour has been included.

  Estimated fee of $1,540

- **Grout Field Sampling of Existing Operations Building Wall Infill** - We anticipate one site visit of three hours for sampling of grout during masonry infill of existing operation building. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental.

  Estimated fee of $520

- **Structural Steel Bolting and Welding** - We anticipate three site visits of averaging two hours each for each canopy structure. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental.

  Estimated fee of $845

- **Asphalt Testing** - We anticipate bore holes and trenches in the roadway will have aggregate base backfilled on top and testing would have already been performed prior to the asphalt repair work that may need sampling and or testing. We have allotted a small budget if needed. We have assumed that the contractor will submit a mix design complete with lab results verifying mix meets project requirements. We will provide two site visits of four hours each to monitor temperature of mix and roller patterns. The project inspector may elect to perform these duties.

  Estimated fee of $855

- **Engineering Oversight, Administrative Processing, Project Management, and Team Meetings/Communications** - We will be in communication with the construction manager, geotechnical engineer, resident engineer, and city staff as needed and requested during the project to ensure quality assurance requirements are met. We understand there will be team meetings at critical junctures of the project such as at the beginning of the work, and we wish to participate in those meetings. Other project management tasks include certified payroll compliance, invoicing, budget monitoring, status reporting, resource scheduling, and internal LACO quality review procedures.

  Estimated fee of $6,585

Total estimated fee to provide the materials testing services listed in the Summary is: **$41,030**

Assumptions

- The actual sequencing of work by the contractor has the potential to significantly change the final cost of the services LACO will provide for this project. Costs could be reduced or increased depending on contractor performance.
- Each site visit represents a typical site visit, portal to portal, inclusive of labor, vehicle charges, and equipment charges.
- LACO will rely on the project inspector and resident engineer to coordinate the total number of site visits needed to meet the quality assurance and testing requirements of the project.
- LACO assumes submittals for imported backfill will include the proper documentation certifying that the materials meet the project requirements.
- Material testing performed by LACO in no way relieves the Contractor of their obligation to perform the work in accordance with the requirements of the Contract Documents.
- Prevailing wage rates for onsite time for LACO staff has been assumed. We will submit weekly certified payroll to the designated compliance person.
- LACO requests client or client representative assist in providing safe access during onsite visits to facilitate required field testing and sampling.
- Access to contract documents including project plans, specifications, and any changes to the documents during construction, erosion and sediment control requirements, environmental protection measures, and other pertinent construction documents.

LACO ASSOCIATES
ENGINEERS • GEOLOGISTS • ENVIRONMENTAL CONSULTANTS

SCHEDULE OF RATES – REGION 1

HOURLY RATES

Principal Engineer*	$133 - 160.00 per hour
Project Manager*	$115 - 140.00 per hour
Senior Engineer*	$92 - 145.00 per hour
Staff Engineer*	$77 - 123.00 per hour
Assistant Engineer*	$75 - 105.00 per hour
Junior Engineer*	$62 - 85.00 per hour
Senior Drafter/Technician	$67 - 97.00 per hour
Drafter/Technician	$49 - 67.00 per hour
Special Consultants (depends on qualifications)	$60 - 180.00 per hour
Senior Geotechnical Engineer	$165 per hour
Court Appearance/Depositions	(4 hour minimum) $300 - 400.00 per hour
Licensed Surveyor	$100 - 115 per hour
One-Man Party GPS – RTK	$140.00 per hour
One-Man Party - Prevailing Wage Rates	$155.00 - 165.00 per hour
One-Man Robotic Survey	$130.00 per hour
Two-Man Party GPS – Static	$160.00 - 190.00 per hour
Two-Man Survey Party - Prevailing Wage Rates	$200.00 - 230.00 per hour
Two-Man Survey Party	$155.00 - 185.00 per hour
Three-Man Survey Party	$200.00 - 230.00 per hour
Three-Man Survey Party - Prevailing Wage Rates	$270.00 per hour
Certified Public Accountant	$95.00 per hour
Project Administrator/Coordinator	$60.00 - 75.00 per hour
Clerical	$45.00 - 65.00 per hour

*Includes Designer, Geologist, Geotechnical Engineer, Planner, Environmental Scientist, or other specialties.

NOTES

1. The above rates are regular hourly rates and include payroll costs, overhead and profit. If overtime is requested by the client, it will be charged at 130% of the above hourly rates.
2. In accordance with State labor laws, prevailing wage rates may be required on State or Federally funded projects. These rates apply to survey party chief, rodman, chainman, soils field tester and materials field tester. The hourly rate differential is $25 to $27 dollars per hour per person depending on project location and labor classification. The differential will be added to the above hourly rates.
3. Outside services will be performed at Cost plus 15%
4. Subsistence will be calculated at Actual Cost plus 15% or agreed per diem rates.
5. All travel time will be charged at the regular hourly rates unless other written arrangements are made.

TRANSPORTATION

Automobile and pickup:*	
Trip charge per day	$65.00 per day
Minimum charge, vehicle	$15.00
Over 80 miles	$25 minimum charge + $0.60 per mile
Other transportation, air travel, etc.	$ Cost + 15%

MATERIALS

Survey hubs, stakes, lath or guineas	$1.00 each
Survey markers, plain iron pipe	$5.00 each
Plan copies per sheet (11x17)	black & white $0.25 color $2.50 each
Plan copies per sheet (24x36)	black & white $5.00 mylar $20.00 color $21.25 each
All other materials or printing	$ Cost + 15%

* Minimum charge of 1/2-day on all equipment billed on daily basis.

** Plus Technician Rate

LACO ASSOCIATES
ENGINEERS • GEOLOGISTS • ENVIRONMENTAL CONSULTANTS

SCHEDULE OF RATES

RATES FOR MATERIALS AND SOILS TESTING

Laboratory tests are performed on samples delivered to our lab in Eureka, California. Sample pick-up, special tests and unusual sample preparation are billed at the applicable hourly rate. Faxes of reports and duplicate mailings are available for $5 each. Reports requiring review and signature will be billed at the applicable rate.

A. AGGREGATE AND SOILS TESTING

100.	Sieve Analysis – coarse and fine, Caltrans 202, ASTM C-136	$100.00
101.	Sieve Analysis – coarse, Caltrans 202, ASTM C-136	$50.00
102.	Sieve Analysis – fine, Caltrans 202, ASTM C-136	$60.00
103.	Finer than #200, ASTM C-117	$50.00
104.	Particle Size Analysis, ASTM D-422***	$80.00
105.	Cleanness Value, Caltrans 227	$75.00
106.	Sample Preparation	$35.00
107.	USDA Textural Suitability Analysis (per point)***	$50.00
108.	Bulk Density, Leachfield System Suitability	$35.00
109.	Atterberg Limits, LL-PL-PI, ASTM 4318***	$100.00
110.	Sand Equivalent, Caltrans 217, ASTM D-2419	$60.00
111.	Specific Gravity – coarse, Caltrans 206, ASTM C-127	$60.00
112.	Specific Gravity – fine, Caltrans 207, ASTM C-128	$70.00
113.	Maximum Density of Soils, Caltrans 216, ASTM D-698 or D-1557	$150.00
114.	Maximum Density of Soils with Rock Correction, ASTM D-4718	$175.00
301.	Nuclear Density Gauge (hourly), Caltrans 231, ASTM D6938 **	$15.00
302.	Nuclear Density Gauge (daily), Caltrans 231, ASTM D6938 **	$85.00
116.	Organic Impurities, ASTM C-40	$75.00
117.	Moisture Content of Soils In Place, ASTM D-2216	$15.00
118.	Density of Soils In Place, ASTM 2937	$30.00
119.	Percent Crushed Particles, Caltrans 205, ASTM D-5821	$100.00
120.	Durability Index – coarse, Caltrans 229, ASTM D-3744	$70.00
121.	Durability Index – fine, Caltrans 229, ASTM D-3744	$70.00
125.	Consolidation, 3" dia., ASTM D-2435***	$280.00
127.	Direct Shear, ASTM D-3080 (3 points)	$275.00
128.	Direct Shear, ASTM D-3080 (per additional point)	$55.00
129.	Sample Preparation	$35.00
130.	Expansion Index, ASTM D-4829***	$150.00
131.	Pocket Penetrometer	$10.00
135.	Unit Weight, ASTM C-29	$60.00

For other testing not listed, please inquire.

B. CONCRETE AND FIELD TESTING

151.	Concrete Compressive Strength, Caltrans 521, ASTM C-39	$20.00
152.	Specimen Processing and Curing (each), ASTM C-31	$5.00
153.	Disposable Concrete Molds	(each) $3.00
154.	Concrete Mix Design, Preparation, Review, and Adjustment	$200.00
156.	Percent Entrained Air (Method ASTM C-231 or C-173)**	$20.00
157.	Shrinkage Test, ASTM C-157 (3 bars)	(per test) $250.00
158.	Concrete Rebound Test, ASTM C-805**	(per day) $25.00
159.	Coring; Concrete, CMUs and AC, 4-inch core **	$3.00 per inch length
161.	Coring; Concrete, CMUS and AC, 6-inch core **	$3.00 per inch length
163.	Splitting Tensile Strength, ASTM C-496	(per test) $90.00

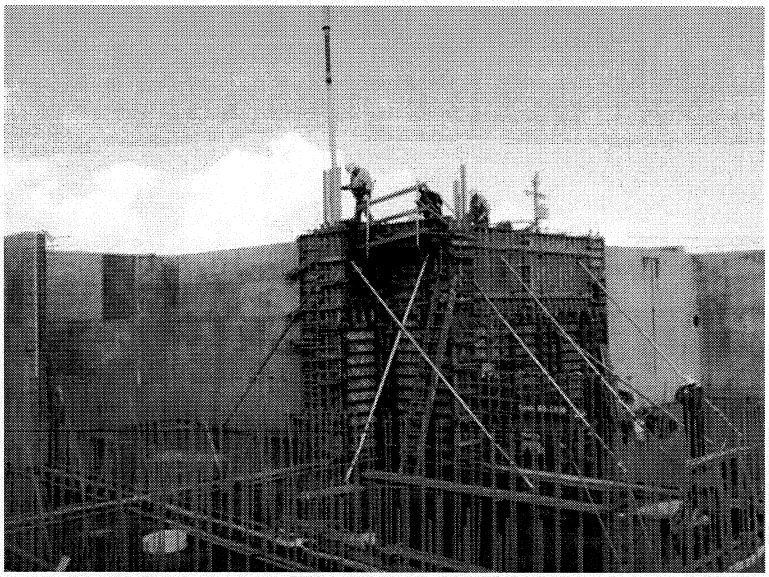
C. SPECIAL EQUIPMENT

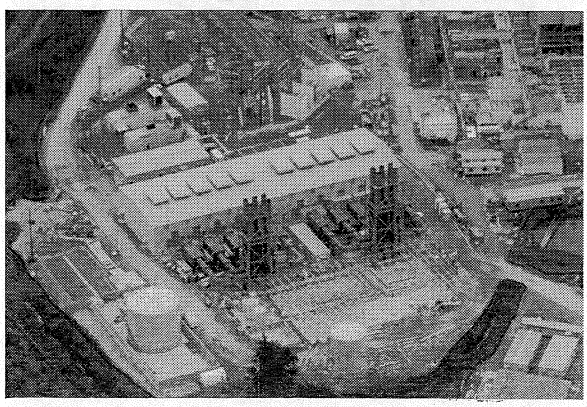
246.	Skidmore **	(per day) $60.00
303.	Core Drilling Machine**	(per day) $75.00
333.	Load Cell **	(per hour) $15.00
334.	Torque Wrench **	(per hour) $10.00
310.	Environmental Drill Rig with Operator(s)	(per hour) $135 - 180.00
300.	Geotechnical Drill Rig with Operator(s)	(per hour) $150 - 195.00
308.	Drill Push Rig with Operator(s)	(per hour) $150 - 195.00
311.	Drilling Support Truck *	(per day) $85.00
9901.	C-57 Licensed Well Driller	(per hour) $120.00
320.	Photoionization Hydrocarbon Vapor Detector *	(per day) $100.00
450.	Field Lab Analysis (Hanby)	(per test) $25.00
332.	Turbidity Meter *	(per day) $20.00
352.	Dissolved Oxygen Meter *	(per day) $40.00
245.	pH/T/K Meter *	(per day) $40.00
247.	Water Level Meter	(per day) $25.00
321.	Bladder Pump/2" Submersible Pump *	(per day) $45.00
224.	Cam/Portable Pump (12-volt)	(per well) $5.00
336.	Pressure Washer *	(per day) $45.00
323.	Steam Cleaner/Pressure Washer *	(per day) $75.00
456.	Rotary Hammer Boring System	(per boring) $25.00
452.	Hydro Punch	(per sample) $30.00
454.	Continuous Core Sampler	(per foot) $5.00
249.	Generator *	(per day) $40.00
244.	4-Channel Datalogger *	(per day) $115.00
354.	Hand Auger *	(per day) $25.00
22.	Traffic Control Cones (25) *	(per day) $8.00
31.	Barricade *	(per week) $5.00
23.	Passive Skimmer (1 liter)	(per week) $15.00
24.	Electric Skimmer	(per week) $125.00
326.	Submersible Pump *	(per day) $45.00
322.	Centrifugal Pump *	(per day) $100.00
252.	Confined Space Multi-Gas Meter (LEL, Oxygen, PID, Hydrogen Sulfate, CO)	(per day) $90.00

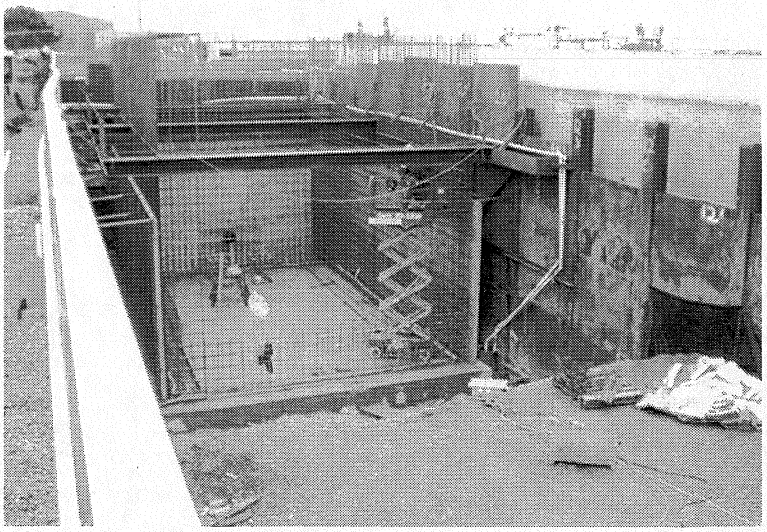
* Minimum charge of 1/2-day on all equipment billed on daily basis.
** Plus Technician Rate
*** Sample preparation not included

CITY OF RIO DELL

Proposal for Wastewater Treatment Facility
Specialty Testing and Inspection Services







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LEONARD M. OSBORNE • CE 38573
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CHRISTOPHER J. WATT • PG 7586/CEG 2415
FRANK R. BICKNER • PG 7428
RONALD C. CHANEY, Ph.D • CE 29027/GE 00934

March 30, 2011

7448.00

City of Rio Dell
675 Wildwood Avenue
Rio Dell, California 95562

Attention: Ron Henrickson, City Manager

Subject: Proposal for Specialty Testing and Inspection Services

Dear Ron:

LACO Associates (LACO) is pleased to submit this letter of interest, qualifications, and fee estimate to perform Testing and Inspection Services for the City of Rio Dell Wastewater Treatment Plant. Working for HDR, LACO performed the Geotechnical consulting services, which gives us a deeper understanding of inspection concerns and soils issues for this project. Our geologist, Giovanni Vadurro worked cooperatively with Randy Jensen to develop a valued approach to utilizing recycled materials for the sprung steel structure at the wastewater plant. We look forward to maintaining this positive and productive relationship with the City during the course of this project. Giovanni will be available to the City for this project as demands arise.

The requested scope of services is well suited for our capabilities. We believe our familiarity with and previous work on the project site makes us uniquely qualified to perform the requested scope of services. Our in-house team is staffed with field inspectors and laboratory and field technicians with the necessary knowledge, experience, and understanding to effectively perform the Testing and Inspections required for the new Wastewater Treatment Plant. Our laboratory is Caltrans and DSA certified, AMRL and CCRL accredited, and is overseen by our Laboratory Manager as well as a licensed Civil Engineer, both of whom are responsible for assuring the quality of laboratory test results generated by testing of field samples obtained from the project site.

Our approach to the above listed project is based upon our ongoing success of performing similar work on both large and small projects for numerous government entities throughout Northern California. The cornerstones of those successes are:

- **Proactive Communication** - Effective communication between the City, the Architect, the Designer, the Contractor, and the Special Inspector/Testing Technicians anticipates and avoids potential problems during construction.
- **Team Building and Solution Focus** - LACO has a proven record of developing positive working relationships among the project stakeholders. This approach has

shown success, including projects constructed under the current Building Code where early coordination efforts between all parties involved has achieved project specific goals including required Testing and Inspection in a timely and cost effective manner.

- **Knowledge and Experience** - LACO's Certified Special Inspectors and Testing Technicians have the required knowledge, experience, and Certifications to perform the specified Testing and Inspection duties to assure that your projects are constructed in conformance with Project Specifications.
- **Flexibility and Resources** - LACO's office in Eureka, California is in close proximity to the proposed project site and allows us rapid response during project construction. The LACO team has the Special Inspection/Materials Testing and Laboratory resources needed to meet the demands of your project.

Thank you for considering LACO as a member of the team that will assist in the construction of this project for the City of Rio Dell. We are capable and ready to assist the City by ensuring the specified material and construction quality requirements of the project are met.

Please call me at (707) 443-5054, if you have any questions.

Sincerely,
LACO Associates

Leonard M. Osborne, PE
President

Attachments

P:\7400\7448 City of Rio Dell\7448.00 Wastewater T&I\01 Proposal Documents\7448.00 Proposal Cover Letter.doc

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FIRM PROJECT EXPERIENCE

LACO has provided a wide variety of engineering and/or construction materials testing and inspection services for a multitude of projects in the local community as well as outlaying areas. Total construction costs for individual projects have ranged from a few thousand to several million dollars.

Our list of satisfied clients includes:

- Garberville Sanitary District
- City of Ukiah
- Ukiah Valley Sanitary District
- Stover Engineering (Crescent City Wastewater Pollution Control Facility)
- Manhard Consulting (Ferndale Wastewater Treatment Plant)
- Pinoleville Tribe
- Coyote Valley Tribe
- Ukiah Community Golf Course
- Lake County
- McKinleyville Union School District
- College of the Redwoods (multiple projects at main and Fort Bragg and Del Norte campuses)
- City of Eureka – Outfall
- PG&E (multiple projects) including Humboldt Bay Generating Station
- City of Arcata – Levee Repair
- Humboldt County Dept. of Public Works
- General Growth Inc., Bayshore Mall (multiple projects)
- Cher-ae Heights Casino (multiple projects)
- Bear River Casino
- Blue Lake Casino
- Winzler and Kelly Consulting Engineers
- State of California Department of Corrections
- Del Norte County Unified School District (multiple projects)
- Del Norte County
- Humboldt State University
- Mendocino College (Ukiah, Lake County)
- Mendocino Coast Recreation and Park District
- Mendocino Unified School District
- Safeway
- Fortuna Union School District

Services LACO has provided for our clients include one or more of the following:

- Special Inspections per the IBC and CBC Title 24
- Laboratory Materials Testing of soils, aggregates, rebar, and concrete
- Geological Investigations
- Geotechnical Investigations and Fill Certification
- Environmental Investigations and Remediation
- Civil Engineering and Design
- Structural Engineering and Design
- Geotechnical Engineering and Design
- Surveying
- Planning and Permitting

AVAILABLE STAFF RESOURCES

The following LACO staff members will be available to assist with this project.

Materials Testing and Special Inspections Staff

Leonard Osborne, PE

Principal-in-Charge

Mr. Osborne is LACO's firm principal overseeing the material testing lab. He has over 28 years experience in civil design and engineering materials testing and evaluation. Mr. Osborne will provide quality control, quality assurance, for LACO's efforts on all laboratory testing, field inspections, and project documentation.

Nathan Toews, PE

Staff Engineer / Lab Director

Mr. Toews has over nine years of experience performing structural design and soil evaluation services pertaining to constructability issues. Mr. Toews will provide quality control, quality assurance, and laboratory test data evaluation on all laboratory testing.

Richard Yahn, GE, PE

Geotechnical Engineer / Professional Engineer

Mr. Yahn has over 35 years of geotechnical investigation, design and inspection experience for schools, commercial and industrial facilities, and private development. Mr. Yahn will be available to perform assessment of onsite soil conditions during project construction on an as needed basis.

Dale Romanini, ACI, ICC

Laboratory Manager, Field Inspector, and Field Testing Technician

Mr. Romanini has over 11 years experience in laboratory and construction materials testing and Special Inspection. Mr. Romanini will be available to perform, concrete sampling and testing, soil compaction testing, mechanical and chemical anchorage testing, and laboratory testing of samples obtained from the project sites.

George Iakovkin, AWS CWI, ICC, ACI

Senior Special Inspector / Field Testing Technician

Mr. Iakovkin has over 15 years experience in construction materials testing, Special Inspection, and contractor Quality Control. Mr. Iakovkin will be available to perform, concrete reinforcement placement inspection, monitor concrete placement, concrete sampling and testing, soil compaction testing, masonry inspection and grout placement observation and testing, mechanical and chemical anchorage testing, and laboratory testing of samples obtained from the project sites.

Giovanni Vadurro, PG, CEG

Senior Geologist and Field Testing Technician

Mr. Vadurro is a Senior Staff Geologist with over 19 years of experience performing soil evaluation, including sub grade inspections in conformance with the project soils reports. Mr. Vadurro will be available to perform assessment of onsite soil conditions during project construction on an as needed basis.

Chad Christie, ACI

Special Inspector / Field Testing Technician

Mr. Christie has over seven years experience in laboratory and construction materials testing and Special Inspection. Mr. Christie will be available to perform concrete sampling and testing, soil compaction testing, mechanical and chemical anchorage testing, and laboratory testing of samples obtained from the project sites.

Brian Gerber, ACI

Special Inspector / Field and Laboratory Testing Technician

Mr. Gerber has with over six years experience in laboratory and construction materials testing and Special Inspection. Mr. Gerber will be available to perform concrete sampling and testing, soil compaction testing, mechanical and chemical anchorage testing, and laboratory testing of samples obtained from the project sites.

Additional Personnel

LACO has additional well qualified staff not included in this proposal that are available on an as needed basis to meet the project requirements.

COORDINATION OF TESTING AND INSPECTIONS

LACO has a long established history of effectively responding to and performing testing and inspection as a project team member or on an as needed basis. Effective and timely communication between the Resident Engineer, the Contractor, and LACO has always been a critical element in the scheduling of testing and inspection. The contractor informs the Resident Engineer or designated representative of testing and inspection needs and the required timeframe in which those tasks need to be performed. The Resident Engineer in turn coordinates with the testing laboratory to schedule testing and inspection. In instances where testing and inspection is required offsite for products to be delivered to the project site for installation, or for improved timelines on critical inspections, LACO has in the past communicated directly with the subcontractor performing the work with prior approval of the Resident Engineer while keeping the Resident Engineer informed on an ongoing basis of the offsite results. LACO has a reputation for quick and timely response regardless of the scheduling circumstances.

Despite the best intentions of all parties involved with coordinating observations and inspections on complex construction, changes and breakdowns can occur. Our inspectors, with the full support of a professional engineering staff behind them, have the ability to react accordingly to changing conditions during the construction process while holding the quality of construction as their top concern. Under these circumstances, experience, knowledge, and efficiency of coordination become critical. Our Inspectors draw upon their own knowledge and experience in order to consult with in-house engineers, the design team, and the Resident Engineer to develop special tests and inspections to meet the intent of building codes and project construction documents. To accomplish this, the normal pathway of information flow can be enhanced so that time-critical information can be provided to the field staff in order to facilitate appropriate testing and inspection in a timely manner. Communication is maintained with all parties involved in construction and the project required documentation is distributed in a timely manner.

An additional approach to coordination that many of our clients have found valuable in the past is a pre-bid review of testing and inspection requirements in the project documents. While many tests and inspections are required by code, we have found that we can typically reduce cost to our clients either in testing or construction cost by making recommendations to project designers regarding material or aggregate types, quality, or test method substitutions or approaches that do not change the intent of the Documents Approved for Construction or the quality of the construction. In the past these types of recommendations have resulted in savings to our clients.

SCOPE OF SERVICES

LACO Associates is pleased to submit this scope and fee estimate for specialty testing and inspection services. Based upon our review of the Project Plans and Specifications, services provided will generally consist of soil and concrete laboratory testing, soil compaction testing, field concrete sampling and testing, structural steel bolting and welding as needed. The general Scope of Services will be provided on a time and materials basis. The actual cost of services will be determined by the contractor's construction schedule and construction techniques.

Laboratory and Field Testing Summary

- **Lab testing of Soil Backfill Materials** - We have anticipated the utilization of both native materials imported material and have budgeted for maximum density curves for up to four structural backfill soil types. We have assumed that the contractor's submittals will include lab tests verifying suitability of proposed materials.

  Estimated fee of $810

- **Compaction Testing of Force Main** - We have assumed 25 site visits averaging three hours each. The number of site visits is based upon the linear feet of pipeline. It is assumed that the Contractor will utilize boring in lieu of open trench for pipe placement and test locations will be limited to the bore pits and/or short distances of open trench. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. We have anticipated site work will be completed on an intermittent basis over the course of the project.

  Estimated fee of $9,970

- **Compaction Testing of Tank Backfill** - We have assumed two site visits, averaging four hours each. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. We have anticipated site work will be completed intermittently over the course of the project.

  Estimated fee of $980

- **Compaction Testing of Existing Building Slab Infill** - We have assumed two site visits, of eight hours each. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. We have anticipated site work will be completed intermittently over the course of the project.

  Estimated fee of $1,860

- **Concrete Cylinder Lab Testing for Compressive Strength** - We have assumed 33 sets of concrete cylinders will be required to meet the project requirement of one set per 50 yards of structural concrete or fraction thereof. This is based on the expectation that the contractor will pour the main tank slab in two large pours and the remaining concrete work to be completed intermittently over the course of the project. Compressive strength testing of each set is inclusive of lab testing, engineer review of results, and distribution of results to the owner, design team, and the contractor

  Estimated fee of $6,195

- **Concrete Field Sampling and Testing of Tank Slab** - We anticipate two site visits of eight hours for the main tank slab pour. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of concrete cylinders from each pour has been included.

  Estimated fee of $1,775

- **Concrete Field Sampling and Testing of Tank Walls** - We anticipate eight site visits of averaging five hours each for the tank wall pours. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of concrete cylinders from each pour has been included.

  Estimated fee of $4,795

- **Concrete Field Sampling and Testing of Bridge Pipe Pedestals** - We anticipate ten site visits of averaging three hours each for the bridge pedestal pours. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of concrete cylinders from each pour has been included.

  Estimated fee of $4,290

- **Concrete Field Sampling and Testing of Miscellaneous Structures** - We anticipate three site visits of averaging four hours each for miscellaneous structures. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of concrete cylinders from each pour has been included.

  Estimated fee of $1,540

- **Grout Field Sampling of Existing Operations Building Wall Infill** - We anticipate two site visits of three hours for sampling of grout during masonry infill of existing operation building. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental. Sample pickup of grout samples from each pour has been included.

  Estimated fee of $860

- **Structural Steel Bolting and Welding** - We anticipate three site visits of averaging two hours each, one for each canopy structure. Each site visit is inclusive of portal to portal labor, vehicle charge, and equipment rental.

  Estimated fee of $845

- **Asphalt Testing** - We anticipate bore holes and trenches in the roadway will have aggregate base backfilled on top and testing would have already been performed prior to the asphalt repair work that may need sampling and or testing. We have allotted a small budget if needed. We have assumed that the contractor will submit a mix design complete with lab results verifying mix meets project requirements. We will provide two site visits of four hours each to monitor temperature of mix and roller patterns. The project inspector may elect to perform these duties.

  Estimated fee of $1,015

- **Engineering Oversight, Administrative Processing, Project Management, and Team Meetings/Communications** - We will be in communication with the construction manager, geotechnical engineer, resident engineer, and city staff as needed and requested during the project to ensure quality assurance requirements are met. We understand there will be team meetings at critical junctures of the project such as at the beginning of the work, and we wish to participate in those meetings. Other project management tasks include certified payroll compliance, invoicing, budget monitoring, status reporting, resource scheduling, and internal LACO quality review procedures.

  Estimated fee of $6,095

Total estimated fee to provide the materials testing services listed in the Summary is: **$41,030**

Assumptions

- Geotechnical excavation and/or subgrade inspections are not included in this estimate. As Geotechnical Engineer of Record we recommend that LACO be retained to perform inspections as needed to verify sub soils are in compliance with project recommendations.
- The actual sequencing of work by the contractor has the potential to significantly change the final cost of the services LACO will provide for this project. Costs could be reduced or increased depending on contractor performance.

- Each site visit represents a typical site visit, portal to portal, inclusive of labor, vehicle charges, and equipment charges.
- LACO will rely on the project inspector and resident engineer to coordinate the total number of site visits needed to meet the quality assurance and testing requirements of the project.
- LACO assumes submittals for imported backfill will include the proper documentation certifying that the materials meet the project requirements.
- Material testing performed by LACO in no way relieves the Contractor of their obligation to perform the work in accordance with the requirements of the Contract Documents.
- Prevailing wage rates for onsite time for LACO staff has been assumed. We will submit weekly certified payroll to the designated compliance person.
- LACO requests that the Contractor or Owner's representative assist in providing safe access during onsite visits to facilitate required field testing and sampling.
- Access to contract documents including project plans, specifications and any changes to the documents during construction, erosion and sediment control requirements, environmental protection measures, and other pertinent construction documents, will be provided by City.

ESTIMATED COST OF T & I SERVICES FOR RIO DELL WASTEWATER FACILITY						
ITEM	**DESCRIPTION OF SERVICES**	**INDIVIDUAL SERVICES**	**UNITS**	**RATE**		**COST**
1	Soil Testing or Observation (LAB)	Max Density of Soils	1.00	150.00	$150.00	
		Engineer Review (hourly)	0.25	125.00	$31.25	
		Project Management (hourly)	0.25	86.00	$21.50	
		Subtotal for each soil type			**$202.75**	
		Lab total for	**4.00**	**soil types**		**$811.00**
	Soil Testing or Observation (LABOR) **Force Main**	Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
		PW Testing Technician (2 hrs onsite)	2.00	91.00	$182.00	
		Nuke Gauge (daily)	0.50	85.00	$42.50	
		Vehicle Charge (daily)	0.50	65.00	$32.50	
		Engineer Review (hourly)	0.25	125.00	$31.25	
		Administrative (hourly)	0.25	60.00	$15.00	
		Project Management (hourly)	0.25	86.00	$21.50	
		Subtotal per site visit			**$398.75**	
		Labor total for	**25.00**	**3 hour site visits**		**$9,968.75**
	Soil Testing or Observation (LABOR) **Tank backfill**	Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
		PW Testing Technician (3 hrs onsite)	3.00	91.00	$273.00	
		Nuke Gauge (daily)	0.50	85.00	$42.50	
		Vehicle Charge (daily)	0.50	65.00	$32.50	
		Engineer Review (hourly)	0.25	125.00	$31.25	
		Administrative (hourly)	0.25	60.00	$15.00	
		Project Management (hourly)	0.25	86.00	$21.50	
		Subtotal per site visit			**$489.75**	
		Labor total for	**2.00**	**4 hour site visits**		**$979.50**
	Soil Testing or Observation (LABOR) **Exisiting bldg slab infill**	Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
		PW Testing Technician (7 hrs onsite)	7.00	91.00	$637.00	
		Nuke Gauge (daily)	1.00	85.00	$85.00	
		Vehicle Charge (daily)	1.00	65.00	$65.00	
		Engineer Review (hourly)	0.25	125.00	$31.25	
		Administrative (hourly)	0.25	60.00	$15.00	
		Project Management (hourly)	0.25	86.00	$21.50	
		Subtotal per site visit			**$928.75**	
		Labor total for	**2.00**	**8 hour site visits**		**$1,857.50**
2	Concrete Testing or Observation (LAB) Yardage divided by 50	Compressive Strength Testing	4.00	20.00	$80.00	
		Concrete Curing & Processing	4.00	10.00	$40.00	
		Engineer Review (hourly)	0.25	125.00	$31.25	
		Administrative (hourly)	0.25	60.00	$15.00	
		Project Management (hourly)	0.25	86.00	$21.50	
		Subtotal for each cylinder set			**$187.75**	
		Lab total for	**33.00**	**sets of cylinders**		**$6,195.75**

Concrete Testing or Observation (LABOR) **Tank slab**	Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
	PW Testing Technician (7 hrs onsite)	7.00	85.00	$595.00	
	Sample Pickup	1.00	100.00	$100.00	
	Vehicle Charge (daily)	1.00	65.00	$65.00	
	Engineer Review (hourly)	0.25	125.00	$31.25	
	Project Management (hourly)	0.25	86.00	$21.50	
	Subtotal per site visit			**$886.75**	
	Labor total for	**2.00**	**8 hour site visits**		**$1,773.50**
Concrete Testing or Observation (LABOR) **Tank walls**	Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
	PW Testing Technician (4 hrs onsite)	4.00	85.00	$340.00	
	Sample Pickup	1.00	100.00	$100.00	
	Vehicle Charge (daily)	0.50	65.00	$32.50	
	Engineer Review (hourly)	0.25	125.00	$31.25	
	Project Management (hourly)	0.25	86.00	$21.50	
	Subtotal per site visit			**$599.25**	
	Labor total for	**8.00**	**5 hour site visits**		**$4,794.00**
Concrete Testing or Observation (LABOR) **Bridge pedestrals**	Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
	PW Testing Technician (2 hrs onsite)	2.00	85.00	$170.00	
	Sample Pickup	1.00	100.00	$100.00	
	Vehicle Charge (daily)	0.50	65.00	$32.50	
	Engineer Review (hourly)	0.25	125.00	$31.25	
	Project Management (hourly)	0.25	86.00	$21.50	
	Subtotal per site visit			**$429.25**	
	Labor total for	**10.00**	**3 hour site visits**		**$4,292.50**
Concrete Testing or Observation (LABOR) **Misc structures**	Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
	PW Testing Technician (3 hrs onsite)	3.00	85.00	$255.00	
	Sample Pickup	1.00	100.00	$100.00	
	Vehicle Charge (daily)	0.50	65.00	$32.50	
	Engineer Review (hourly)	0.25	125.00	$31.25	
	Project Management (hourly)	0.25	86.00	$21.50	
	Subtotal per site visit			**$514.25**	
	Labor total for	**3.00**	**4 hour site visits**		**$1,542.75**
Grout Testing or Observation (LABOR) **Operation building wall infill**	Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
	PW Testing Technician (2 hrs onsite)	2.00	85.00	$170.00	
	Sample Pickup	1.00	100.00	$100.00	
	Vehicle Charge (daily)	0.50	65.00	$32.50	
	Engineer Review (hourly)	0.25	125.00	$31.25	
	Project Management (hourly)	0.25	86.00	$21.50	
	Subtotal per site visit			**$429.25**	
	Labor total for	**2.00**	**3 hour site visits**		**$858.50**

3		CWI Inspector (1 hr mob & travel)	1.00	74.00	$74.00	
	Welding Testing or Observation (field)	CWI Inspector (1 hrs onsite)	1.00	98.00	$98.00	
		Testing Equipment	0.25	50.00	$12.50	
		Vehicle Charge (daily)	0.50	65.00	$32.50	
	1 site visit per canopy	Engineer Review (hourly)		125.00	$0.00	
		Administrative (hourly)		60.00	$0.00	
		Project Management (hourly)	0.75	86.00	$64.50	
		Subtotal per site visit			**$281.50**	
		Lab total for	**3.00**	**2 hour site visits**		**$844.50**
4		Testing Technician (1 hr mob & travel)	1.00	74.00	$74.00	
	Asphalt Testing or Observation (LABOR)	PW Testing Technician (3 hrs onsite)	3.00	91.00	$273.00	
		Nuke Gauge (daily)	0.50	85.00	$42.50	
	Patchwork if needed	Vehicle Charge (daily)	1.00	65.00	$65.00	
		Engineer Review (hourly)	0.25	125.00	$31.25	
		Project Management (hourly)	0.25	86.00	$21.50	
		Subtotal per site visit			**$507.25**	
		Labor total for	**2.00**	**4 hour site visits**		**$1,014.50**
5		Clerical (hourly)	0.25	60.00	$15.00	
	Project Management & Administratvie	Engineer Review (hourly)	0.25	125.00	$31.25	
		Project Management (hourly)	0.25	86.00	$21.50	
		Subtotal			**$67.75**	
		Project total for	**90.00**	**days of testing activity**		**$6,097.50**
		TOTAL				**$41,030.25**
		No Contingency				
	March 29, 2011	**TOTAL with NO contingency**				**$41,030.25**

EACH SITE VISIT ESTIMATE REPRESENTS A TYPICAL 4-8 HOUR PORTAL TO PORTAL SITE VISIT INCLUSIVE OF LABOR, VEHICLE CHARGES, AND EQUIPMENT CHARGES.

NOTE: The final cost may be subject to change due to contractor scheduling, construction techniques, weather delays, supplemental testing, number of retests, etc. The wage rates may vary depending upon staff availability at the time of the request. Material testing and special inspections performed by LACO in no way relieves the Contractor of their obligation to perform work in accordance with the requirements of the Contract Documents. Services beyond those listed above will be preapproved by client prior to performing additional work. Equipment rental not shown above will be billed per standard rate sheet.

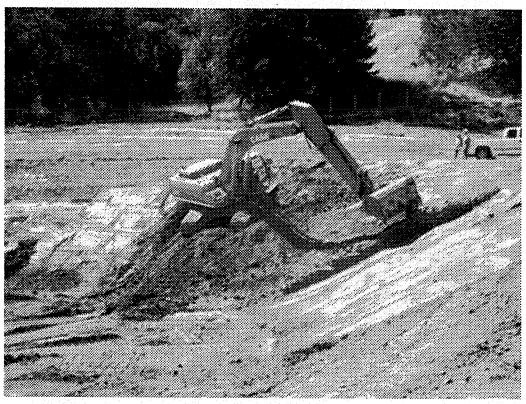
(1) The rate for each visit will be adjusted to reflect portal to portal time for the technician or inspector. Technician or inspector time in excess of 8 hours per day shall be invoiced at 1.3 times the stated rate.

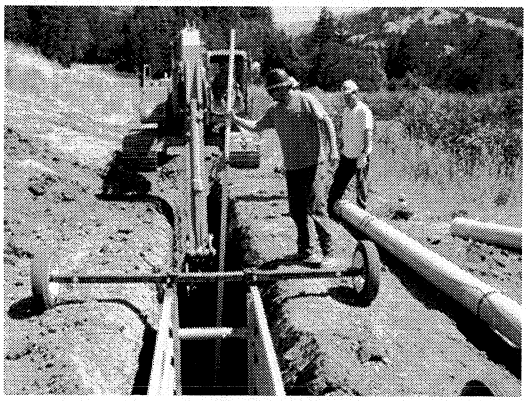
Attachment 1
Project References

LACO ASSOCIATES

PROJECT REFERENCE

GARBERVILLE SANITARY DISTRICT
CONSTRUCTION TESTING & INSPECTION SERVICES





KEY PERSONNEL

Leonard Osborne, PE
Principal Engineer
Dale Romanini
Materials Testing Lab Manager
Giovanni Vadurro
Professional Geologist
California Engineering Geologist
George Iakovkin
Senior Special Inspector

KEYS TO SUCCESS

- Professional geologist onsite during site earthwork and trenching operations
- Qualified personnel resources for meeting the material testing and Special Inspection project requirements
- Responded to client needs in a timely and effective manner with minimal notice
- Effective communication with contractors while maintaining quality assurance requirements

CLIENT CONTACT INFORMATION

Mark Bryant, Chief Administrative Officer
Herb Schwartz, Chairman, Board of Directors
Garberville Sanitary District
(707) 923-2223

PROJECT DESCRIPTION

LACO provided Special Inspection, field sampling and testing, and laboratory testing and analysis for improvements of an existing waste water treatment facility. Facility improvements included the construction of a new wastewater holding pond, placement of several thousand feet of pipeline and the construction of a new operations building. Construction was completed in February 2011.

Services provided included the following:

Special Inspection and Field Testing

- Site excavation and structural backfill observation
- Density testing of trench backfill through public right-of-ways and site structural backfill
- Special Inspection of reinforcing steel
- Field sampling and testing of structural concrete
- Special Inspection of structural steel field welding
- Non destructive testing of structural steel field welding

Laboratory Testing and Analysis

- Concrete mix design review and verification
- Compression testing of concrete field samples
- Moisture/density curve analysis to facilitate field density testing
- Sieve analysis of structural backfill materials
- Characterization of structural backfill materials

LACO also provided Construction Management and Resident Engineering services for the prior GSD Collection System Improvement project. Challenges for the construction staff were created by conditions within the CalTrans right-of-way of the US Highway 101 corridor. These challenges required rigorous coordination and resolution of issues to maintain safe travel through this vital corridor. LACO staff coordinated design changes with CalTrans and maintained completion of the project on schedule. LACO also performed pay request reviews and change order review and recommendations during the course of construction.

Additional efforts included construction inspection of:

- Bore and jac under Caltrans right-of-way
- Sewer collection mains in county right-of-way
- Cast-in-place dosing wet well
- New headworks facility building
- Sleeve and inverted siphon in Bear Gulch Bridge
- Decommissioning of aerial pipe spans crossing Eel River

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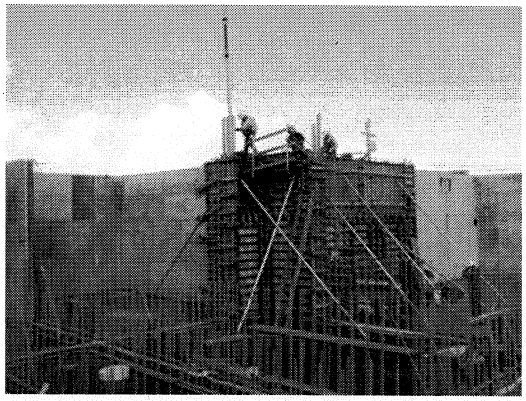
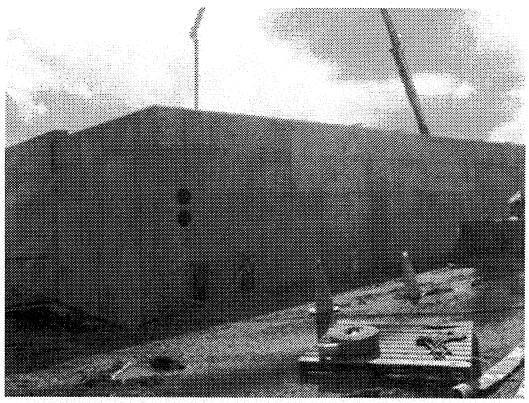
PROJECT REFERENCE

FERNDALE WASTEWATER TREATMENT PLANT





KEY PERSONNEL

Dale Romanini
Materials Testing Lab Manager
George Iakovkin
Senior Special Inspector
Chad Christie
Special Inspector/Testing Technician
Brian Gerber
Special Inspector/Testing Technician

CURRENT KEYS TO SUCCESS

- Qualified personnel resources for meeting the material testing and Special Inspection project requirements
- Maintain positive relationship and proactive communication with project Resident Engineer
- Respond to client needs in a timely and effective manner with minimal notice
- Effective communication with contractors while maintaining quality assurance requirements

CLIENT CONTACT INFORMATION

Kent Hanford
Manhard Consulting
(775)225-9408
427 F St. Suite 236 Eureka, CA 95501

PROJECT DESCRIPTION

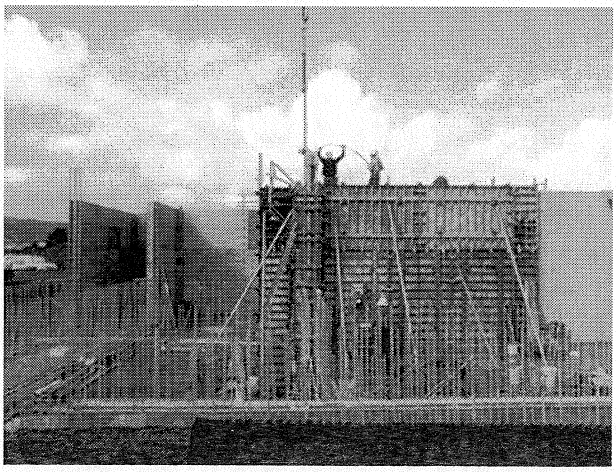
LACO is currently providing Special Inspection, field sampling and testing, and laboratory testing and analysis services for the construction of a new waste water treatment facility serving the community of Ferndale, Ca. scheduled for completion in 2012.

Services being provided include the following:

Special Inspection and Field Testing
- Special Inspection of reinforcing steel placement
- Field sampling and testing of structural concrete
- Density testing of trench backfill and site structural backfill

Laboratory Testing and Analysis
- Compression testing of concrete field samples
- Moisture/density curve analysis to facilitate field density testing

Anticipated services to be performed prior to project completion
- Special Inspection of high strength bolting
- Special Inspection of structural welding



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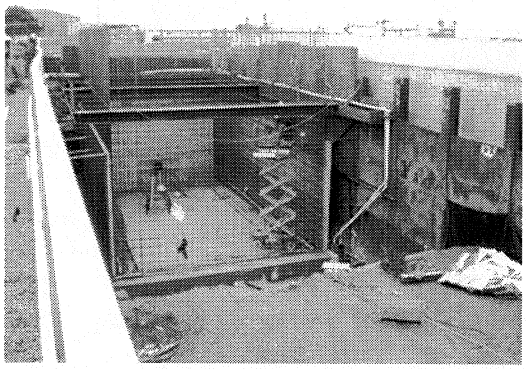
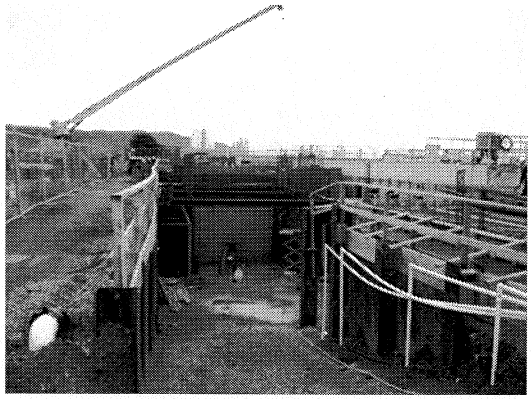
PROJECT REFERENCE

CRESCENT CITY WASTEWATER POLLUTION CONTROL FACILITY





KEY PERSONNEL

Dale Romanini
Materials Testing Lab Manager
George Iakovkin
Senior Special Inspector
Chad Christie
Special Inspector/Testing Technician
Brian Gerber
Special Inspector/Testing Technician

KEYS TO SUCCESS

- Qualified personnel resources for meeting the material testing and Special Inspection project requirements
- Maintained positive relationship and proactive communication with project Construction Manager
- Responded to client needs in a timely and effective manner with minimal notice
- Effective communication with contractors while maintaining quality assurance requirements
- Effective project management

CLIENT CONTACT INFORMATION

Ward Stover
Stover Engineering
(707) 465-6742
711 H Street, Crescent City, CA 95531

PROJECT DESCRIPTION

LACO provided Special Inspection, field sampling and testing, and laboratory testing and analysis for the construction of a new waste water treatment facility completed in 2010.

Services provided included the following:

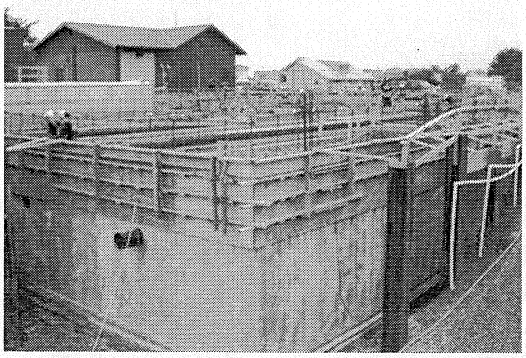
Special Inspection and Field Testing

- Field sampling and testing of structural concrete
- Fulltime batch plant inspection during concrete batching operations
- Field sampling and testing of mortar and grout during masonry construction
- Sampling of high strength grout placement at equipment bases
- Special Inspection of structural steel welding in shop and field
- Non destructive testing of shop welding fabrication
- Thickness testing of structural steel coatings
- Density testing of trench backfill and site structural backfill

Laboratory Testing and Analysis

- Compression testing of concrete and grout field samples
- Moisture/density curve analysis to facilitate field density testing
- Testing of concrete aggregates
- Sieve analysis of structural backfill materials
- Characterization of structural backfill materials

Estimated Construction Costs: $33 Million



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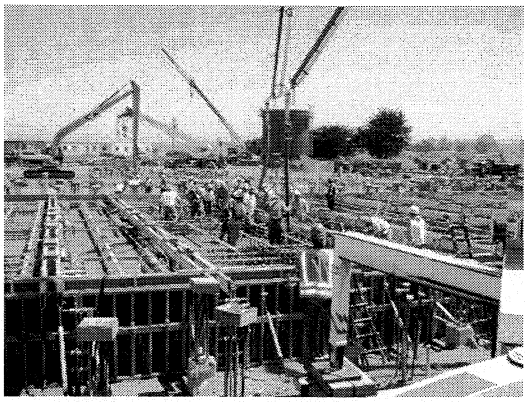
PROJECT REFERENCE

HUMBOLDT BAY GENERATING STATION



KEY PERSONNEL

George Iakovkin
Senior Special Inspector
Dale Romanini
Material Testing Lab Manager
Brian Gerber
Special Inspector/Testing Technician
Chad Christie
Field Testing Technician
Nathan Toews, PE
Professional Engineer
David Lindberg, CEG
Engineering Geologist

KEYS TO SUCCESS

- Proactive communication between LACO, design team, contractor, and client representative
- Active communication and coordination with onsite Project Inspection team
- Fulltime onsite Special Inspector to meet expanding Quality Assurance requirements
- Maintain on call testing services to meet Contractor's evolving schedule

CLIENT CONTACT INFORMATION

Joe Sutton
Pacific Gas & Electric
6-Wide Office Modular
1000 King Salmon Avenue
Eureka, CA 95503

PROJECT DESCRIPTION

LACO recently provided construction materials testing and Special Inspection services during site demolition and construction of a new natural gas fired 165 megawatt power plant located adjacent to Humboldt Bay.

Services provided included the following:

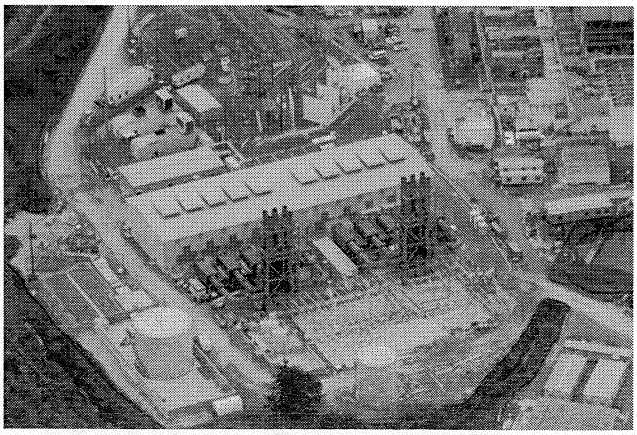
Special Inspection and Field Testing

- Special Inspection of approximately 2000 tons of structural reinforcing steel
- Placement observation, sampling and testing of approximately 8000 yards of structural concrete
- Special Inspection of erection and high strength bolting of approximately 1000 tons of structural steel
- Special Inspection of structural steel welding and mechanical piping welding
- Special Inspection of structural masonry construction
- Special Inspection during installation of approximately 5000 epoxy and mechanical anchors
- Special Inspection and sampling of grout placement at approximately 1000 steel column baseplates
- Special Inspection of seismic anchorage for electrical equipment and mechanical piping
- Density testing of trench backfill and site structural backfill
- Geotechnical inspections and recommendations for as found site soil conditions

Laboratory Testing and Analysis

- Compression testing of concrete and grout field samples
- Moisture/density curve analysis to facilitate field density testing
- Sieve analysis of structural backfill materials
- Characterization of structural backfill materials

Total Construction Costs: Approximately $600 million



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PROJECT REFERENCE

SAFEWAY INC.
NO. 2908 EUREKA TESTING & INSPECTION SERVICES

KEY PERSONNEL

Dale Romanini
Materials Testing Lab Manager
Bryan Dussell, PG
Staff Geologist
George Iakovkin
Senior Special Inspector
Brian Gerber
Special Inspector
Chad Christie
Special Inspector
Richard Yahn, RGE
Geotechnical Engineer
Nathan Toews, PE
Assistant Lab Director

KEYS TO SUCCESS

- Established relationship and active communication with Safeway and general contractor staff
- Effective project management
- Provided on call testing services to better document construction activities
- Utilize prior project experience to offer solutions for project concerns
- Increased role to hold client's quality assurance concerns

CLIENT CONTACT INFORMATION

Bill Eister
Safeway, Inc.
(916) 727-1994
7301 Greenback Lane, Citrus Heights, CA 95621

PROJECT DESCRIPTION

LACO is currently providing material testing and geotechnical support for the construction of a new 49,000 square foot store and 200,000 square feet of new parking lot . Phase 1 consists of site improvements including MSE retaining wall, stormwater detention/infiltration swale, underground utilities, and general parking lot improvements. The site has construction challenges due to fine-grained soils, perched groundwater and undocumented fill soils. LACO has worked in a proactive role with the Owner and Contractor to create solutions to these ongoing concerns to keep construction progressing, while insuring quality on the final product.

Our project team is working closely with the Safeway construction management staff, the general contractor, and his subcontractors to meet the project quality assurance requirements:

- County right of way utility improvements compaction testing
- Site grading, compaction testing, parking lot improvements
- Hilfiker retaining wall compaction testing and laboratory analysis of backfill materials
- Geotechnical inspection for compliance with project soils report
- Geotechnical recommendations for as found site conditions
- Investigation of detention/infiltration swale capacity per project plans
- Structural concrete placement, sampling, and rebar placement inspection

In addition, LACO will support the following quality control of Phase 2 of this project which is scheduled for completion in 2012.

- Geotechnical inspections of remaining site improvements including future footprint of 49,000 square foot store
- Compaction testing and observation of building pad
- Concrete reinforcement placement, concrete sampling and testing for new store building pad
- High strength bolting special inspections
- Welding special inspection of concrete tilt up panels and steel structural members
- Post installed concrete anchors special inspection and/or tension testing
- Laboratory testing of concrete, grout, and soils

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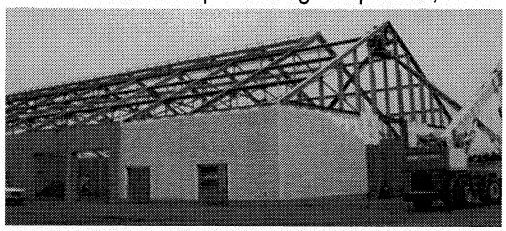
SELECT PROJECT EXPERIENCE

C.V. Starr Community Center & Sigrid and Harry Spath Aquatic Facility, Fort Bragg, CA

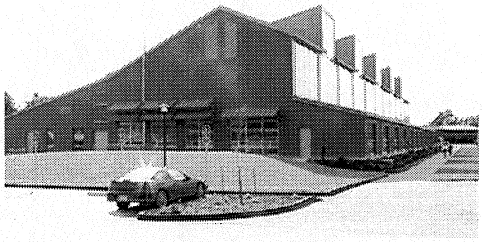
At the request of Tri-B Construction Management LACO provided Special Inspection services for the new Aquatic Center located in Fort Bragg, CA.

Services provided included field and shop welding inspection, non-destructive testing of structural steel weldments, and field welding inspection of steel decking.

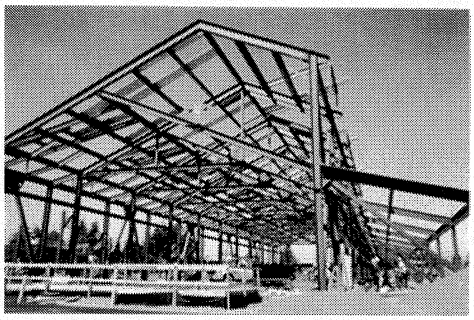


Total Construction Costs: Approximately $19 million

College of the Redwoods Learning Resource Center, Eureka, CA



LACO provided engineering, construction materials testing, and Special Inspection services for a new 39,000 square foot single story building. The project consisted of a structural steel eccentric brace frame building with a cast-in-place reinforced concrete mat slab foundation.



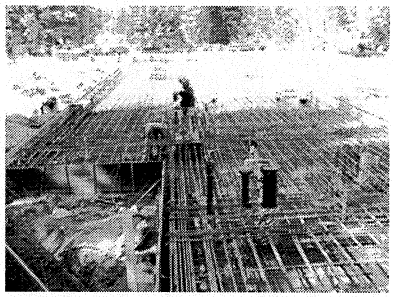
Services provided included seismic and geotechnical site investigations, observation and testing during site excavations, compaction testing during backfill operations, sampling and testing of approximately 8,500 cubic yards of structural concrete, sampling and testing of concrete reinforcing steel, Special Inspection of structural steel welding (shop fabrication, field erection and welding, and non-destructive examination of completed welds), high strength bolting observation and testing, and chemical and mechanical anchorages.

Total Construction Costs: $14 million

College of the Redwoods Child Development Center, Eureka, CA

LACO provided engineering, construction materials testing, and Special Inspection services for a new 15,000 foot single story building. The project consisted of a structural steel eccentric brace frame building with a cast-in-place reinforced concrete mat slab foundation.

Services provided included seismic and geotechnical site investigations, observation and testing during site excavations, compaction testing during backfill operations, sampling and testing of approximately 1,400 cubic yards of structural concrete, sampling and testing of concrete reinforcing steel, Special Inspection of structural steel welding (shop fabrication, field erection and welding, and non-destructive examination of completed welds), structural masonry, high strength bolting observation and testing, and chemical and mechanical anchorages.



Total Construction Costs: $4.4 million

Redwood Harley-Davidson, Eureka, CA

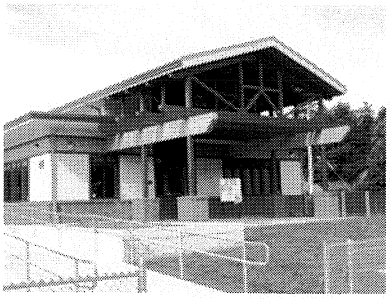
LACO provided construction materials testing and Special Inspection services for a new 20,000 square foot single story building. The project consisted of a prefabricated and shop fabricated structural steel frame building with a cast-in-place concrete slab-on-grade floor founded on continuous foundations.

Services provided included laboratory materials testing, compaction testing of structural backfill, concrete sampling, testing, and placement observation, and Special Inspections per the UBC Chapter 17 including concrete reinforcing steel placement and on-site structural steel welding.

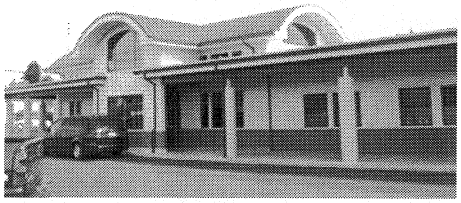
Total Construction Costs: $3.5 million

Eureka City Schools, Eureka, CA

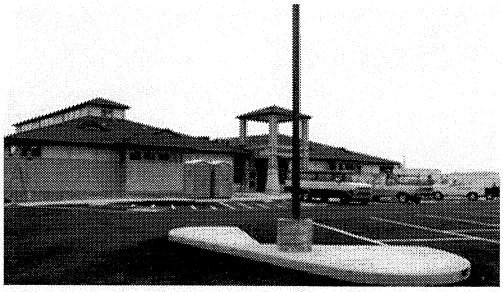
LACO provided construction materials testing and Special Inspection services for expansion and/or remodel of several elementary schools in Eureka.



Services provided included laboratory materials testing, compaction testing of structural backfill, concrete sampling and laboratory testing of samples, load testing of mechanical and chemical anchorages, and structural steel welding inspection (shop fabrication and field welding).



Del Norte County Unified School District Alternative Education Center, Crescent City, CA



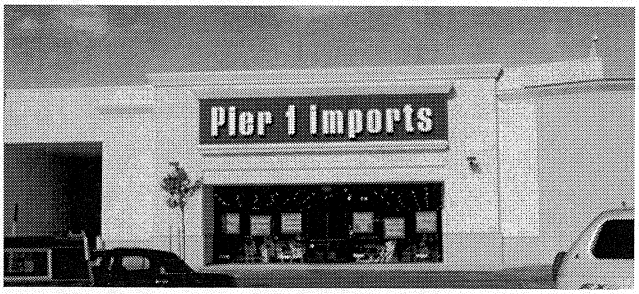
LACO provided engineering, construction materials testing, and Special Inspection services for a new 18,000 square foot building. The project consisted of a multi-story wood frame building with structural steel interior columns and a cast-in-place concrete slab-on-grade founded on continuous and isolated foundations.

Services provided included site survey and geological assessment, Storm Water Pollution Prevention Plan, civil design, laboratory testing and inspection of adjacent streets, internal roads, parking lots, grading, drainage, and utility improvements, and structural steel welding inspection.

Total Construction Costs: $1.5 million

Pier 1 Imports – Bayshore Mall, Eureka, CA

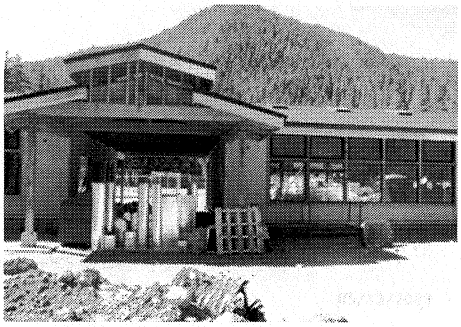
LACO provided construction materials testing and Special Inspection services for a remodel and expansion of the Bayshore Mall for a new retail store.



Services provided included laboratory materials testing, compaction testing of recompacted fill, concrete sampling and laboratory testing of samples, inspection of concrete reinforcing for a slab-on-grade floor and grade beams over piling, epoxy dowel placement inspection, inspection of structural steel welding of the roof extension and the roof support structure, and high strength bolting observation and verification.

Del Norte County Unified School District Gasquet Elementary School, Gasquet, CA

LACO provided engineering, construction materials testing, and Special Inspection services for a new elementary school. The project consisted of four new wood frame classrooms and an administration building using steel columns and a new structural steel frame gymnasium.



Services provided included geotechnical site investigation, civil design, laboratory materials testing, compaction testing of engineered fill, concrete sampling and laboratory testing of samples, structural steel welding inspection (shop fabrication and field erection), and high bolt sampling, testing, and observation.

Total Construction Costs: $1 million

Attachment 2

Project Team Resumes

LEONARD M. OSBORNE, PE

PRINCIPAL-IN-CHARGE

AREAS OF EXPERTISE

Project Management
Design and Construction Engineering
Hydrology
Hydraulic Calculations
Water Systems
Geotechnical Engineering

EDUCATION

BS in Civil Engineering, University of Utah, Salt Lake City, UT
Graduate Studies in Civil Engineering, University of Southern California, Los Angeles, CA

REGISTRATIONS & CERTIFICATIONS

California Civil Engineer - License No. 38573

PROFESSIONAL MEMBERSHIPS

American Society of Civil Engineers - Member
ASFE - Member
American Water Works Association - Member
American Council of Engineering Companies - California - Chapter Officer 2003 to Present, Current Chapter President

PROFESSIONAL EXPERIENCE

Mr. Osborne has over 28 years of experience in public and private project management, design and construction engineering, geotechnical engineering, environmental analysis, land development, project planning, feasibility assessment, and funding acquisition. His duties have included the design, management, direction, and coordination of professional design teams in the preparation of plans, specifications, estimates, reports, and construction management for a wide variety of projects. His accumulated project experience includes industrial facilities, quarries and gravel mines, roadways, structures, site development, pipelines, pumping facilities, dam rehabilitation, grading and drainage, treatment facilities, storage reservoirs, and project permitting. Mr. Osborne has developed a positive working relationship with government personnel and regulatory agencies throughout the region.

Mr. Osborne is a Firm Principal of LACO and serves as its President and CEO in addition to his project activities. In this capacity, he sets the general direction for the firm's performance, progress, and overall management. He oversees the work of approximately 50 employees involved in civil engineering, surveying, environmental engineering, geologic and geotechnical engineering, environmental planning, and special inspections and construction materials testing. Mr. Osborne's project management skills include project scheduling, resource allocation, project coordination, conflict resolution, budget and financing control, system and personnel administration. His broad experience includes project management and technical consulting associated with:

- Structures and site development up to $10 million
- Water infrastructure up to $5 million
- Sewer infrastructure up to $4 million
- Redevelopment projects up to $8 million
- Special inspection and DSA-approved materials testing on public buildings up to $11 million
- Land development projects up to $4 million
- Geotechnical engineering projects up to $9 million

Mr. Osborne served as a Principal Engineer and Senior Project Manager and Engineer on a variety of private and public works projects with other consulting firms. He managed permitting, design and construction management activities, geotechnical projects, materials testing laboratory, and geotechnical and environmental assessments. He also directed a staff of professional engineers and technicians involved in a variety of projects. In a prior role, Mr. Osborne was also the Dam and Tunnel Design Team Leader for Los Angeles Dept. of Water and Power. In this position he directed a team of professional staff involved with the design, analysis and construction or improvements to dams, spillways, pipelines, pump stations and other water infrastructure.

CURRENT PROJECT EXPERIENCE

GSD Wastewater System Improvements - Garberville, CA. Mr. Osborne was principal engineer for design of a multi-phased sanitary sewer system upgrade. During the project's first phase, LACO completed a $1.6 million project removing environmental risk associated with aged suspended aerial spans over environmentally sensitive areas, reducing risk to public health by providing hook-ups to failed septic systems, and by providing capacity for growth 20 years into the future. Mr. Osborne designed improvements to the collection system, a new transmission main in Caltrans right-of-way, a combined gravity/forcemain and lift station to deliver peak wet weather flows.

LEONARD M. OSBORNE, PE

PRINCIPAL-IN-CHARGE

BRB Tish-Non Village Wastewater System - Loleta, CA. Mr. Osborne was principal engineer to provide feasibility assessments, design, and engineering services for the project's wastewater collection, transmission, treatment, dosing lift station, forcemain, and disposal systems. This tribal community development project includes sixty residential lots, fifty-seven space RV park, commercial facilities, recreational facilities, community center, hotel and casino, and an assisted living facility on an 115 acre site. Our project team addressed local and regional hydrogeologic concerns resulting in a unique onsite disposal solution involving dosing and seasonal reclamation incorporated into a planned sports field. Onsite disposal is regulated by the EPA. The wastewater treatment plant is designed to produce wastewater effluent quality consistent with California Title 22 for unrestricted use.

Smith River Rancheria Dat-Naa-Svt Subdivision Project - Smith River, CA. Mr. Osborne was the principal engineer for the subdivision project and the scope also included preliminary design and location of a wastewater lift station to serve the 21 lots. During the course of design, and outside the project scope but within the same budget, LACO prepared a conceptual layout of home sites on two adjacent parcels owned by the Tribe. This conceptual layout produced added value for the Tribe by developing the concepts for future development and assessing loading and optimal location for the lift station to serve the 21 and future lots.

GSD Water Treatment Feasibility Study - Garberville, CA. Mr. Osborne is principal engineer for design of water system improvements including a new surface water treatment plant, 750,000 gallon storage tank, and booster pump station. The project includes a pre-existing Preliminary Engineering Report (PER); defining the preferred project alternative; developing preliminary design and project cost estimate; and completing NEPA and CEQA-PLUS documents to qualify the project for State Revolving Fund/Proposition 50 funding.

BRB Water Treatment Plant, Storage, and Distribution System - Loleta, CA. Mr Osborne is principal engineer for the Bear River Band of the Rohnerville Rancheria (BRB) to provide design and project management services for a potable water well pump station, treatment, and storage facility serving a tribal community development in Loleta, CA. Deliverables included a preliminary design including a 200,000 gallon glass-lined storage tank; submersible VFD-driven well pump; performance specifications for Manganese Greensand and activated carbon pressure filters; in-house architectural design for a CMU pump station building and attached operator office; and tie-in details to provide redundancy to the Tribe's existing system on an adjacent parcel.

Big Lagoon Water System Improvements – Big Lagoon, CA. As principal engineer, Mr. Osborne prepared a hydraulic model to assess the current fire flow capacity and to make recommendations for main line replacements which would provide the most benefit towards increasing the amount of water available for fire suppression. Deliverables included a full system hydraulic model using EPANet. The model incorporated domestic demand under maximum day conditions and used this information to develop anticipated hydrant capacity for each hydrant in the system.

PAST PROJECTS

- Private Development - Preliminary design of a private water distribution system that included fire protection for a 51-lot upscale development in the Fortuna foothills.
- Hydesville Community Water District - Completed a distribution system analysis and improvement recommendations and was also retained to provide detailed design; bid assistance and construction management for a 400,000 gallon welded steel reservoir and recommended main improvements to increase fire flow and improve system redundancy.
- Black Oak Facility - Completed water system rehabilitation for a private campground with 2550 persons per day capacity, work included surface intake design, pump and treatment system design, distribution system upgrades, and additional storage. The system was designed to comply with the Surface Water Treatment Rule.
- Parmallano Cheese - Completed design and construction inspection for a water system with stringent water quality performance process for use in cheese production.

While employed with other firms or agencies, Mr. Osborne's experience included: project engineering and management through design and construction of the Humboldt Community Services District's Freshwater area expansion; a 4.5 million dollar project involving distribution, pumping and storage installations; design and construction inspection of a gravity and high pressure sewer transmission system for Gualala Point Park; A Water source feasibility study that assessed both short and long term options for the City of Fort Bragg, and project management and funding acquisition for the $6.8 million Santa Barbara Water Reclamation project which involved a separate City-wide distribution system design and pumping and tertiary treatment facilities.

NATHAN K. TOEWS, PE

STAFF ENGINEER / LAB DIRECTOR

AREAS OF EXPERTISE

Structural Engineering
Design
Construction Management

EDUCATION

BS in Civil Engineering with Structural Engineering Pattern, California State University at Chico, Chico, California

REGISTRATIONS & CERTIFICATIONS

California Professional Engineer - License No. 70251
ACI Concrete Field Testing Technician - Grade 1

CONTINUING EDUCATION

University of Wisconsin, Madison — Slope Stability and Landslides
California Historic Building Code Seminar

PROFESSIONAL EXPERIENCE

Mr. Toews has over nine years of experience performing structural design and soil evaluation services pertaining to constructability issues. Mr. Toews will provide laboratory oversight of quality control and quality assurance, and laboratory test data evaluation and review on all laboratory testing.

Mr. Toews specializes in structural engineering, including light-frame residential and commercial construction, heavy structural steel framing, concrete and masonry construction, pre-engineered building foundations, retaining walls, and slope stability analysis.

SELECT PROJECT EXPERIENCE

Bear River Band - Community Center - Loleta, CA. Mr. Toews prepared the structural system design for a new 31,000 square-foot community center building. This building features green roofs, extensive skylights, large clear-spans, and a structural system composed of wood framing, structural steel, steel braced frames, and concrete shearwalls.

Basayo Village - Fortuna, CA. Mr. Toews prepared the site and utility design for a multi-family housing development consisting of two four-unit apartment buildings and associated parking, landscaping, and other site improvements. He was also responsible for bid-phase assistance, including bid meetings, responding to bidder requests for information, and bid evaluation. Other duties included complete inspection, materials testing, and construction management services in all phases of construction.

Riverview Terrace Subdivision - Fortuna, CA. Mr. Toews gathered soil and ground profile data and performed a rotational slope stability analysis for the Riverview Terrace Subdivision. He designed a slope drain system based on the results of the stability analysis, and he designed a soil testing schedule and paving system for site-specific soil conditions at new access road.

Mad River Bluffs Stability Analysis - McKinleyville, CA. Mr. Toews performed a slope stability analysis of a retreating portion of the Mad River bluffs. The analysis and conclusions were used by the Humboldt County Department of Public Works as guidance for installation of slope protection measures for protection of adjacent property and structures.

South Fork Eel River Flood Deflection Berm. Mr. Toews modeled approximately three miles of the South Fork Eel River using HEC-RAS software provided by the Army Corps of Engineers, and compared model results to published FEMA data. He also modeled the proposed flood deflection berm and used the resulting data to design the berm structural sections and perform stability analyses of the berm under 100-year flood conditions.

RICHARD E. YAHN, GE, PE

GEOTECHNICAL ENGINEER / PROFESSIONAL ENGINEER

AREAS OF EXPERTISE

Project Management
Geotechnical Engineering
Civil Engineering
Pavement Engineering
Materials Engineering

EDUCATION

BS in Civil Engineering (1976), California State University at Chico, Chico, CA

REGISTRATIONS & CERTIFICATIONS

Geotechnical Engineer (G.E. #913), CA, 1987
Professional Engineer- Civil (P.E. #31022), CA, 1979
Disaster Service Worker, California Safety Assessment Program (SAP63040), Expires 2013

PROFESSIONAL MEMBERSHIPS

American Society of Civil Engineers - Past President of Redwood Empire Branch
Construction Specifications Institute - Board of Directors Member of Redwood Empire Branch
Northern California Engineering Contractors Association - Member of Specifications Committee

PROFESSIONAL EXPERIENCE

Mr. Yahn has over 35 years of experience with performing geotechnical investigations, site soil assessments, and project managing construction materials testing and inspection services for public works, residential, educational, industrial and commercial projects. These projects include: pipelines, water tanks, water and wastewater handling/treatment facilities, wineries, hospitals, schools, subdivisions, apartments, office buildings/business parks, shopping centers, airports, warehouses, churches, geothermal plants, solar arrays, recreational parks, retaining walls, parking structures, roadways, and bridges. Key experience includes:

- Performing and/or supervising laboratory quality control testing of soils, concrete, asphalt concrete and other related construction materials.
- Performing and/or supervising subsurface explorations.
- Observing and/or testing during earthwork, and foundation construction, including pile installation.
- Identifying and defining scope, techniques and prices for project proposals including overseeing development of cost estimates from vendors.
- Providing consistently accurate and timely client and management communications including contract negotiation, invoicing and collections.
- Engineering analysis and report writing, including technical recommendations and decisions within project scope.
- Reviewing project plans and specifications for proposal pricing, and for conformance with technical report recommendations, codes and/or regulations.
- Maintaining a positive attitude, effectively communicating with regulators, and overseeing the work of junior staff and technicians.

SELECT PROJECT EXPERIENCE

WATER/WASTEWATER

Laguna Forcemain Sewer Replacement and Pump Station - Sebastopol, CA. Project manager and engineer for the geotechnical investigation for new 4,000-foot sewer line crossing the environmentally sensitive Laguna De Santa Rosa and State Highway 12, and a related deep wet well. Potentially detrimental site conditions included high groundwater and liquefiable sands. Evaluation included geotechnical constraints to installing an approximately 1,000-foot segment using directional drilling techniques.

Copeland Avenue Sewer Replacement and Pump Station - Petaluma, CA. Project engineer during geotechnical investigation for new sewer line crossing the Petaluma River and related deep wet-well. Potentially detrimental site conditions included high groundwater and liquefiable sands.

Presidio Reservoir - San Francisco, CA. Project engineer during geotechnical investigation for upgrade of an existing distressed reinforced concrete reservoir. Site conditions included variable depth and quality old fill along with saturated soil conditions due to leaking of the reservoir.

Skyhawk Water Tank - Santa Rosa, CA. Project engineer/manager during geotechnical investigation for a steel water tank with a storage capacity of 750,000 gallons. Performed stability and excavatability evaluation of a hillside site to accommodate pad grading including a cut slope of 65 feet in vertical height.

RICHARD E. YAHN, GE, PE

GEOTECHNICAL ENGINEER / PROFESSIONAL ENGINEER

City of Rohnert Park Water Tank - Rohnert Park, CA. Project engineer during geotechnical investigation for 300,000-gallon steel tank. Site is underlain by highly expansive "adobe" clay, and lower portion of tank was buried below grade.

Water Tanks #1 and #2 - American Canyon, CA. Project Engineer during geotechnical evaluation, design and construction for two 120-foot diameter welded steel tanks. The site is located approximately 1.2 miles from the West Napa fault, and is underlain by variable thicknesses of expansive clay. Geotechnical and seismic design parameters were provided, including foundation and grading recommendations, site specific seismic parameters, expansive soil mitigation and recommendations for pipeline loads, thrust blocks, excavation, shoring, and backfill.

DALE L. ROMANINI

MATERIALS TESTING LABORATORY MANAGER

CERTIFICATIONS

American Concrete Institute (ACI) Certifications:
Concrete Field Testing Technician - Grade 1
Aggregate Testing Technician-Level 1
Concrete Laboratory Testing Technician-Level 1
Concrete Strength Testing Technician
CalTrans Certifications:
17 CalTrans Test Methods including Field & Laboratory Testing of:
- Soil
- Aggregate
- Concrete
- Compaction Testing

ICC Certified Spray Applied Fireproofing Special Inspector
Hazardous Waste Site Operation Training (EPA) 40 hour - OSHA 29 CFR 1910.120

PROFESSIONAL EXPERIENCE

Mr. Romanini has been performing testing and Special Inspection of construction materials for over 12 years. His experience includes testing and inspection during construction of schools, hospitals, wastewater treatment plants, commercial buildings, industrial projects, and roadways throughout Northern California. His responsibilities also include managing the materials testing laboratory for the last nine years. As the Materials Testing Laboratory Manager, he is familiar with the full range of the specific soils and concrete testing procedures performed by the LACO materials testing laboratory.

Mr. Romanini responsibilities include assuring that the LACO quality assurance/quality control (QA/QC) laboratory protocol is maintained under AMRL, CCRL, DSA, and Caltrans accreditations, as well as maintaining certification and calibration of testing equipment for field and laboratory use.

In addition to managing the laboratory, Mr. Romanini directs both laboratory and field Inspectors/Testing Technicians in their various duties. He is responsible for coordinating field Testing and Inspection scheduling, tracking project schedules, project testing requirements, and budget expenditures to assure the mutual satisfaction of both the contractor and the contracting officer.

SELECT PROJECT EXPERIENCE

Concrete Sampling and Testing

- PG&E Humboldt Bay Generating Station - King Salmon, CA
- Learning Resource Center at College of the Redwoods - Eureka, CA
- Child Development Center at College of the Redwoods - Eureka, CA
- Mendocino K-8 Campus Improvements - Mendocino, CA
- Del Norte High School - Crescent City, CA
- Washington Elementary School - Eureka, CA
- Freshwater Elementary School - Freshwater, CA
- Fortuna High School - Fortuna, CA
- College of the Redwoods Mendocino Campus - Fort Bragg, CA
- Coming Attractions Theatres Expansion - Eureka, CA
- Orleans Wastewater Treatment Plant - Orleans, CA
- Crescent City Wastewater Treatment Plant, -Crescent City, CA

Mass Grading Inspection and Soil Compaction Testing

- Mountain Elementary School - Gasquet, CA
- Orchard Lane Apartments - Redway, CA
- Scenic Drive Rehabilitation - Trinidad, CA
- Bear River Casino - Loleta, CA
- Various Road Projects - Humboldt County, CA
- Safeway #2908- Eureka, CA

High Strength Bolting

- Learning Resource Center at College of the Redwoods - Eureka, CA
- Child Development Center at College of the Redwoods - Eureka, CA
- Professional Building Retrofit - Eureka, CA
- Gasquet Elementary School - Gasquet, CA
- Healy Building Seismic Retrofit-Eureka, CA

GEORGE A. IAKOVKIN

SENIOR SPECIAL INSPECTOR / FIELD TESTING TECHNICIAN

CERTIFICATIONS

AWS Certified Welding Inspector (CWI)
ASNT and ACCP Certified Level 2 Ultrasonic and Magnetic Particle Testing Technician
Troxler Certified Nuclear Gauge Operator
CalTrans Certifications:
Nuclear Density Gauge Operator
International Code Council (ICC) Certifications:
Structural Welding Special Inspector
Structural Steel and Bolting Special Inspector
Reinforced Concrete Special Inspector
Structural Masonry Special Inspector
Spray Applied Fireproofing Special Inspector
DSA Certified Structural Masonry Special Inspector
American Concrete Institute (ACI) Certifications:
Concrete Field Testing Technician - Grade 1

PROFESSIONAL EXPERIENCE

Mr. Iakovkin has been performing testing and Special Inspection of construction materials for over 15 years. His experience includes testing and inspection during construction of schools, hospitals, wastewater treatment plants, commercial buildings, industrial projects, and roadways and bridges throughout California, Nevada, Oregon, and southern Washington. His responsibilities as a Special Inspector have included structural steel welding, erection, and non-destructive examination of shop and field welds and weldments, reinforced concrete, structural masonry, spray applied and intumescent fireproofing, mass fill placement observation and compaction testing, and asphalt inspection and testing on numerous multi-million dollar projects.

SELECT PROJECT EXPERIENCE

Mass Grading Inspection and Soil Compaction Testing:

- Trinity County Juvenile Detention Facility - Weaverville, CA
- Various Road Projects City of Redding - Redding, CA
- Various Road Projects Humboldt County - Humboldt County, CA
- Hydesville Community Services District Waterline Upgrade - Hydesville, CA
- PG&E Humboldt Bay Generating Station - King Salmon, CA
- Ferndale Wastewater Treatment Plant - Ferndale, CA
- Crescent City Wastewater Treatment Plant - Crescent City, Ca.
- Safeway No.2908, Eureka, CA

Concrete Sampling and Testing:

- College of the Redwoods Outreach Campuses - Fort Bragg & Crescent City, CA
- Ferndale Wastewater Treatment Plant - Ferndale, CA
- PG&E Humboldt Bay Generating Station - Eureka, CA
- Mendocino Unified School District K-8 Campus - Mendocino, CA
- Crescent City Waste Water Treatment Plant - Crescent City, CA

Reinforced Concrete Special Inspection:

- PG&E Humboldt Bay Generating Station - King Salmon, CA
- Trinity County Juvenile Detention Facility - Weaverville, CA
- Turtle Bay Sundial Bridge - Redding, CA
- City of Medford Parking Structure #1, Medford, OR
- Simpson College Dormitory No. 3, Redding, CA

Structural Masonry Special Inspection, Sampling and Testing

- Mendocino Unified School District K-8 Campus - Mendocino, CA
- PG&E Humboldt Bay Generating Station - Eureka, CA
- City of Medford Parking Structure #1 - Medford, OR
- Trinity County Juvenile Detention Facility - Weaverville, CA
- Office Depot, Redding, CA

Welding Inspection, NDT, & High Strength Bolting Inspection:

- College of the Redwoods Learning Resource Center - Eureka, CA
- College of the Redwoods Child Development Center - Eureka, CA
- PG&E Humboldt Bay Generating Station - Eureka, CA
- Mendocino Unified School District K-8 Campus - Mendocino, CA
- Gasquet Elementary School - Gasquet, CA
- Crescent City Waste Water Treatment Plant, Crescent City - CA
- Paris Hotel Casino and High Rise - Las Vegas, NV
- Eiffel Tower - Las Vegas, NV
- Turtle Bay Sundial Bridge - Redding, CA
- Golden 1 Credit Union High rise - Sacramento, CA

GIOVANNI A. VADURRO, PG, CEG

SENIOR GEOLOGIST

AREAS OF EXPERTISE

Fluvial Geomorphic Mapping
Seismic Hazard Investigations
Landslide Mapping
Structural Geology
Soils

EDUCATION

Humboldt State University —Three semesters (20 units) of graduate-level course work
BS in Geology, Humboldt State University, Arcata, CA
Slope Stability and Landslides — University of Wisconsin — Madison College of Engineering
Geotechnical Site Investigation using Cone Penetration Testing— Gregg Drilling
GPS Real Time Surveying and Geomatics Software — Trimble
OSHA Competent Person (Excavation and Trench Shoring Safety)
Nuclear Gauge Safety and Operation — CPN Corporation
Hazardous Waste Operations and Emergency Response — OSHA 29 CFR 1910.120
Construction Inspection of Public Works Projects — U.C. Berkeley, ITS

REGISTRATIONS & CERTIFICATIONS

California Professional Geologist - License No. 7437
California Certified Engineering Geologist - License No. 2554

PROFESSIONAL EXPERIENCE

Mr. Vadurro joined LACO in June of 1997 and is currently a Senior Staff Geologist. His responsibilities include design of field data acquisition programs, conducting and supervising field work, data collection and interpretation, and preparation of technical reports.

His cumulative project experience includes:

- Geologic investigations of quarry sites
- Fault trench mapping and seismic hazard investigations for critical infrastructure and essential public facilities located along active faults including oil and gas pipelines, nuclear storage facilities, and public schools
- Landslide mapping and qualitative slope stability analysis for industrial timber harvest plans, hard rock quarries, and siting of commercial and residential facilities
- Aerial photographic mapping and interpretation
- Application of remote sensing and digital terrain mapping in engineering geology and hazards assessment
- Tectonic and fluvial geomorphologic mapping
- Surficial and bedrock mapping
- Structural geologic mapping and interpretation
- Soil profiling, mapping, and classification
- Hydrogeologic characterization conducting slug tests, bail-down tests, extended period pump tests, and percolation tests
- Geologic hazard assessment for foundations, roadways, retaining structures, slope stabilization measures, structural fills, and drainage layouts
- Geotechnical investigations for commercial and residential site development
- Installation and soil logging of geotechnical boreholes while performing simultaneously as field geologist and driller's helper on both rotary and direct-push drill rigs
- Commercial and residential waste water treatment system design
- ALTA, boundary, and topographic surveying; and construction staking

In addition to his professional experience with LACO, Mr. Vadurro has instructed a graduate-level course consisting of "Quaternary Tectonics and Paleoseismology" during spring semester 2001 at Humboldt State University. The teaching curriculum included three hours of lecture and three hours of field methods per week.

Mr. Vadurro served as a Geomorphologist for the California State Parks in 1997 and 1998 performing surficial and bedrock mapping, landslide inventorying, stream channel topographic surveying and data reduction, and preparation of technical reports.

In 1992 and 1994, Mr. Vadurro was a Physical Science Technician for the United States Geological Survey. His main responsibilities included aiding senior scientists in performing fault trench mapping, surficial and bedrock mapping, topographic surveying of fault scarps, and data reduction and interpretation for the siting of a nuclear storage facility at the Nevada Test Site in Mercury, Nevada.

CHAD A. CHRISTIE

SPECIAL INSPECTOR / FIELD TESTING TECHNICIAN

CERTIFICATIONS

American Concrete Institute (ACI) Certifications:
Concrete Flatwork Technician- Grade I
Concrete Field Testing Technician- Grade I
NRMCA Pervious Concrete Technician
Certified Nuclear Gauge Operator
CalTrans Certifications:
7 CalTrans Test Methods including Field & Laboratory Testing of:
- Soil
- Aggregate
- Concrete
- Asphalt Density Testing

40hr HAZWOPER

EDUCATION

BS in Concrete Industry Management, Construction Management, California State University at Chico, Chico, CA
Minor in Business Administration, California State University at Chico, Chico CA

PROFESSIONAL EXPERIENCE

Mr. Christie has been involved in building construction and testing and Special Inspection of construction materials for over 10 years. His experience includes testing and inspection during construction of schools, wastewater treatment plants, commercial buildings, industrial projects, and roadways throughout Northern California as well as Construction Management of materials testing projects. His responsibilities as a materials testing technician have included sampling, testing, and placement observation of structural concrete, concrete batch plant inspection during batching operations, and mass fill placement observation and compaction testing of compacted fill.

SELECT PROJECT EXPERIENCE

Concrete Sampling and Testing

- PG&E Humboldt Bay Generating Station - King Salmon, CA
- Crescent City Wastewater Treatment Plant - Crescent City, CA
- Ferndale Wastewater Treatment Plant – Ferndale, CA
- Bear River Band Community Center – Loleta, CA
- Dows Prairie School – McKinleyville, CA
- Mendocino College Modular Building Relocation – Ukiah, CA
- Crescent Elk Elementary School – Crescent City, CA
- Bear River Band Residential Housing Project – Loleta, CA
- Healthsport Fitness – Eureka, CA

Mass Grading Inspection and Soil Compaction Testing

- Arcata Levee Repair – Arcata, CA
- Safeway #2908 - Eureka, CA
- Mendocino College Modular Building Relocation – Ukiah, CA
- PG&E Humboldt Bay Generating Station - King Salmon, CA
- Bear River Band Residential Housing Project – Loleta, CA
- Scenic Drive Rehabilitation – Trinidad, CA
- Dows Prairie School – McKinleyville, CA
- Bear River Band Community Center – Loleta, CA

BRIAN J. GERBER

SPECIAL INSPECTOR / FIELD & LABORATORY TESTING TECHNICIAN

CERTIFICATIONS

American Concrete Institute (ACI) Certifications:
Concrete Field Testing Technician - Grade 1
CalTrans Certifications:
16 CalTrans Test Methods including Field & Laboratory Testing of:
- Soil
- Aggregate
- Concrete
- Compaction Testing

Certified Nuclear Gauge Operator
40hr HAZWOPER

EDUCATION

BS in Geology, Humboldt State University, Arcata, CA

PROFESSIONAL EXPERIENCE

Mr. Gerber has been performing testing and Special Inspection of construction materials for over 6 years. His experience includes site assessment of in place soils for suitability as engineered fill, field and laboratory testing and inspection during construction of schools, hospitals, wastewater treatment plants, commercial buildings, industrial projects, and roadways throughout California. His responsibilities as a Special Inspector have included reinforced concrete, mass fill placement observation and compaction testing, and asphalt inspection and testing on numerous multi-million dollar projects.

SELECT PROJECT EXPERIENCE

Mass Grading Inspection and Soil Compaction Testing
- Safeway #2908 - Eureka, CA
- Scenic Drive Rehabilitation – Trinidad, CA
- Bear River Band Community Center – Loleta, CA
- Bear River Band Hotel & Casino Expansion – Loleta, CA
- Ferndale Wastewater Treatment Plant – Ferndale, CA
- Fortuna Middle School New Gymnasium – Fortuna, CA
- Federal Express Warehouse – City of Industry, CA
- Sierra Madre Senior Housing – San Jaciento, CA
- Sycamore Canyon Warehouse Foundation – Riverside, CA

Reinforced Concrete Special Inspection:
- PG&E Humboldt Bay Generating Station - King Salmon, CA
- Ferndale Wastewater Treatment Plant – Ferndale, CA
- Bear River Band Hotel & Casino Expansion – Loleta, CA
- Carpenters Union Training Center – Ontario, CA

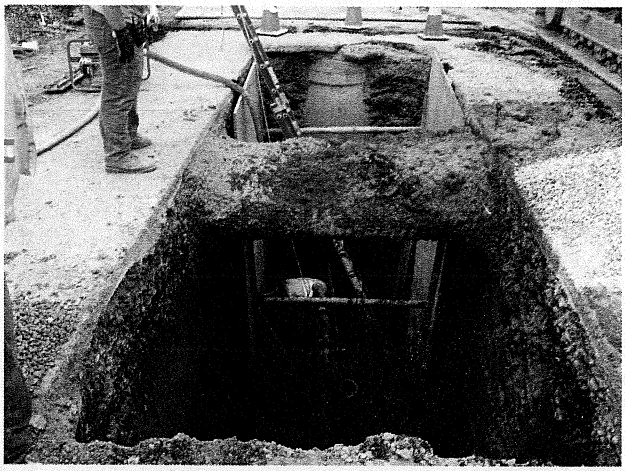
Concrete Sampling and Testing
- PG&E Humboldt Bay Generating Station - King Salmon, CA
- Ferndale Wastewater Treatment Plant – Ferndale, CA
- Bear River Band Community Center – Loleta, CA
- Healthsport Fitness – Eureka, CA
- Bear River Band Hotel & Casino Expansion – Loleta, CA
- Multistory Parking Structure California State University – San Bernadino, CA
- Palo Verde Community College Gymnasium – Blythe, CA
- Carpenters Union Training Center – Ontario, CA
- Saddleback Memorial Hospital Parking Structure – Laguna Hills, CA

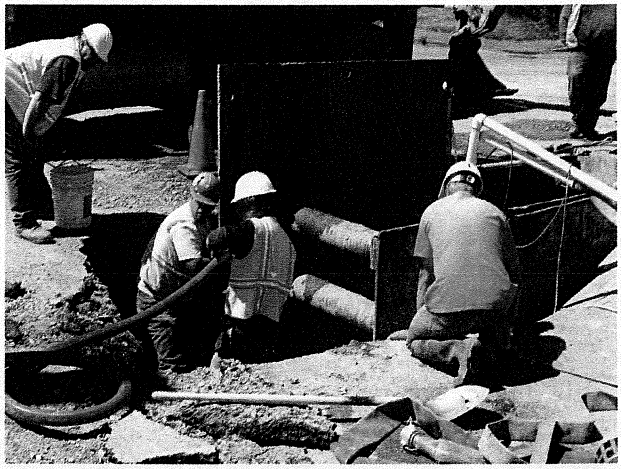
Proposal to Perform Materials Testing and Special Inspection

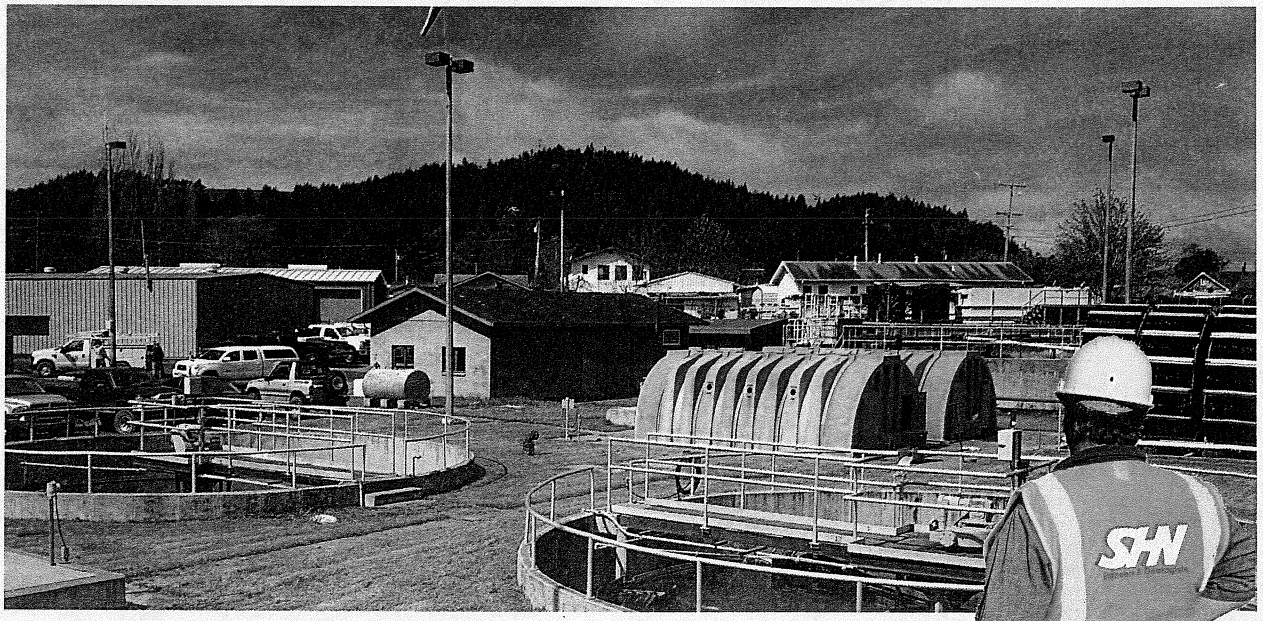
for the

Rio Dell Wastewater Treatment Plant Upgrade and Disposal Project

March 2011







Prepared For:

CITY OF RIO DELL CALIFORNIA

Prepared By:

SHN Consulting Engineers & Geologists, Inc.

CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707-441-8855 • FAX: 707-441-8877 •shninfo@shn-engr.com

Reference: 011000.051

March 30, 2011

Ron Hendrickson, City Manager
City of Rio Dell
674 Wildwood Avenue
Rio Dell, CA 95562

Subject: Proposal for Materials Testing and Inspection Services for the Wastewater Treatment Plant Upgrade and Disposal Project

Dear Mr. Hendrickson:

Thank you for considering SHN Consulting Engineers & Geologists, Inc. (SHN) to provide materials testing and special inspection services for your upcoming Wastewater Treatment Plant Upgrade and Disposal Project.

Throughout the many phases of the City of Rio Dell's infrastructure improvement plan, SHN has been your firm of choice to provide materials testing and special inspection services. We have provided prompt, accurate services for projects that include the new Raw Water Intake Facility, the new aboveground water storage tanks, the Wastewater Treatment Plant Headworks improvements, and many roadway, underground utility and storm damage repair projects. Throughout all of these projects, SHN's qualified staff has assisted in streamlining the process to keep the project moving. As the following proposal illustrates, SHN's materials testing laboratory and technicians will work tirelessly to provide the City of Rio Dell the testing and special inspections necessary to ensure the quality of construction.

SHN's Qualifications and Experience

SHN's certified field technicians stand out because of their experience, qualifications, and commitment to quality. Our technicians are cross-trained, with multiple certifications, which provides depth in our capability to staff your project. This means that there will be no delays in waiting for special inspectors.

Our laboratory is **the only Northcoast laboratory** accredited by the American Association of State Highway and Transportation Officials (AASHTO) for meeting the requirements of American Society for Testing and Materials-International **(ASTM) E329** "Standard Specification for Agencies Engaged in Construction Inspection and/or Testing," which defines the minimum requirements for inspection agency personnel, testing laboratory personnel, and the minimum requirements for equipment and procedures used in the testing and inspection of construction materials. Quality assurance is critical to meeting funding requirements and providing the confidence that the completed project will function correctly. **This critical element of the project should only be done by a firm that is accredited for ASTM E329.**

We are **the only lab** in the North Coast region (from Ukiah to Redding, to the Oregon border) **that provides asphalt concrete mix designs and the full suite of asphalt testing required** during paving operations. While paving operations are a minor element of this project, impacts to the City's existing roadways need to be minimized. Property owners along the path of the alignment to be repaved are extremely sensitive to impacts on their properties; it has to be done right.

To further demonstrate our qualifications, we have selected five projects that are the most relevant to the Wastewater Treatment Plant Upgrade and Disposal Project and that highlight SHN's recent soils and materials testing experience. (See the "Representative Projects" section, below.)

As required, we demonstrate our qualifications to provide **construction management** in a separate proposal. But we feel it is important to point out that Rio Dell will save time and money with a combined construction management and materials testing team from a single source: communication will be streamlined; the support staff is cross-trained and can multitask; and we can cut turnaround time when reporting results.

In addition to material testing and construction management, SHN can also provide construction staking and surveying, labor compliance monitoring, and/or regulatory compliance for stormwater discharges, if necessary for the project.

Key Personnel, Background, and Experience

We have selected an extremely well-qualified team for Rio Dell's Plant Upgrade and Disposal Project. Greg Williston will serve as Project Manager (PM) and Quality Assurance Director (QA); Dave Gonzales will serve as Assistant Project Manager and field technician. Rick Hanford provides oversight of the materials testing laboratory and ensures technical accuracy. Joe Aufdermaur, Jason Baugh, and Leif Ayres will serve as lab technicians and primary field crew. Team members and their roles for this project are introduced below.

Greg Williston, Project Manager

Mr. Williston is SHN's Eureka Regional Manager and has been chosen to manage this project because of his 22 years of experience in the fields of geology, materials testing, and special inspection. His professional experience includes concrete, masonry, and reinforcing steel special inspection, as well as serving as senior laboratory technician and laboratory manager. As Project Manager, Mr. Williston will provide overall guidance and supervision and will maintain close involvement with the construction management team. He will serve as the City's primary contact. Mr. Williston will monitor budget, coordinate the schedule and provide quality review for all SHN work products.

Dave Gonzales, Assistant Project Manager, Materials Testing Technician, and Special Inspector

Mr. Gonzales is our Eureka Laboratory Manager, and has been selected to lead the team of materials testing personnel because of his more than 10 years of construction inspection and materials testing experience. He will ensure that all work is conducted in accordance with the project technical specifications, the geotechnical study, and the City's Quality Assurance Program (QAP). He has been primary special inspector and tester for projects that include roadway excavation and grading, pipeline installation, concrete and rebar placement, and masonry. Mr.

Gonzales is certified with the International Code Council (ICC) for special inspection of reinforced concrete and structural masonry. In addition, he is a Division of the State Architect (DSA) certified structural masonry inspector, American Concrete Institute (ACI) certified field technician, and is certified to perform in-place density testing using a nuclear density gauge.

Rick Hanford, P. E., G. E., Laboratory Technical Manager
Mr. Hanford has overall responsibility for the technical operations of the laboratory and performs periodic QC/QA of field and laboratory technicians. He works closely with Mr. Gonzales, our Laboratory Manager, in outlining procedures for new materials or tests, and will act as the technical liaison between the laboratory and the City's representative. Mr. Hanford will ensure that technical accuracy is maintained throughout the project.

Joe Aufdermaur, Materials Testing Technician and Special Inspector
Mr. Aufdermaur is SHN's Senior Lab Technician. He has been selected for this project because he has worked on the North Coast as a materials tester and has 16 years experience dealing with the challenges presented on earthwork projects in our area, has provided technical support and documentation of site conditions for Horizontal Directional Drilling contractors. Mr. Aufdermaur has vast experience in field testing and inspection that includes concrete, rebar, structural steel bolting, and earthwork. He is an ICC-certified Reinforced Concrete Inspector and NICET Level 1 Geotechnical Engineering Field and Laboratory technician, and maintains our high volume laboratory. In addition, Mr. Aufdermaur is certified to perform in-place density testing using a nuclear density gauge.

Jason Baugh, Materials Testing Technician and Special Inspector
Mr. Baugh has been selected because he brings more than 18 years of experience in various trades in the construction industry, including more than 10 years experience in building and development while working for general building contractors. Mr. Baugh is an ICC-certified Inspector for Structural Concrete and Masonry, and is certified with the National Concrete Masonry Association for sampling and testing materials used in masonry construction. He is an expert in the field of special inspection and testing of reinforcing steel, structural concrete, structural masonry, and drilled-in concrete anchors, which makes him a vital team member in our materials and testing department. In addition, Mr. Baugh is certified to perform in-place density testing using a nuclear density gauge.

Leif Ayres, Materials Testing Technician and Special Inspector
Mr. Ayres was chosen for this team because he is SHN's hot mixed asphalt specialist, with 3 years experience designing asphalt mix designs and providing quality control during paving projects. In addition to his full suite of asphalt qualifications through Caltrans, Mr. Ayres is an ACI-certified field technician and laboratory technician, and is certified to perform in-place density testing using a nuclear density gauge. He will provide field and laboratory testing for this project.

Jerry Frazier, Certified Welding Inspector
Mr. Frazier has been selected to serve as welding inspector for this project because of his 20 years of experience in welding, including 12 years as welder for a construction company and a fabrication shop in Humboldt County. Mr. Frazier is an American Welding Society Certified (AWS) Weld Inspector and is certified through the American Society for Non-Destructive Testing as a Level II NDT technician. He has been providing welding inspection services, concrete testing, soils

moisture/density testing, and quality assurance for a variety of projects including essential buildings, commercial structures, public works, and roads and highways for 8 years. In addition, Mr. Frazier is certified to perform in-place density testing using a nuclear density gauge.

SHN maintains International Code Council (ICC) Special Inspector Credentials that include Reinforced Concrete, Structural Masonry, Structural Steel and Welding, and Spray Applied Fire Proofing, as well as American Concrete Institute (ACI) certified laboratory and field technicians, and a full suite of Caltrans certifications.

A list of SHN's laboratory tests accredited by AASHTO can be found at the AASHTO Materials Reference Laboratory (AMRL) web site (www.amrl.net), SHN encourages you to research our full suite of certifications.

Approach to the Work

SHN will provide materials testing and inspection in accordance with the project technical specifications and Specialty Testing and Inspection table, and at the direction of the Construction Manager and Lead Inspector. Our technicians will sample and test proposed trench backfill materials; perform field density testing of trench backfill; and confirm appropriate compactive effort is producing the specified compaction results.

We will provide the qualified personnel and equipment required to perform special inspections for rebar, anchor bolt installation, and concrete placement, in addition to collecting concrete samples and performing compaction testing.

Certified masonry inspectors will provide special inspection during the Concrete Masonry Unit construction for the Blower Building and collect samples of materials used in the masonry construction.

SHN will provide weld inspection for the Generator Canopy and pipe welding at the Highway 101 undercrossing.

All of our materials testing and special inspection for this project will conform to the City's QAP, project specifications, and California Building Code requirements.

Representative Projects

SHN's materials testing team has built our reputation on public works projects, essential services buildings and critical infrastructure projects. Projects that are relevant to the Wastewater Treatment Plant Upgrade and Disposal project, and highlight our experience, are described below.

Raw Water Intake and Filter Modification Project, City of Rio Dell, CA
Throughout construction of the new infiltration gallery, pump station, and treatment plant, SHN's materials testing laboratory provided special inspection for rebar placement, concrete placement, anchor bolts, and high strength bolt connections. In addition, SHN provided compaction testing for fill materials and collected concrete samples.

Water System Improvements, Crescent City, CA
SHN provided construction inspection and quality assurance testing on this project, which involved more than 15,000 lineal feet of 24- and 16-inch diameter transmission piping, a 4-million gallon welded steel storage reservoir, and more than 40,000 feet of large diameter transmission pipe. Inspection services included concrete sampling and testing, compaction testing for trench backfill materials, and fill placement monitoring.

Rio Dell Wastewater Treatment Plant Facility Upgrade Project, City of Rio Dell, CA
This project was the start of the City of Rio Dell's major plan for upgrading its wastewater treatment capabilities. The treatment plant headworks facility was upgraded to increase the capabilities for processing wastewater, and a drying belt system was installed to maximize efficiency in handling solids treatment. SHN sampled concrete, performed compaction testing for earthwork, and conducted anchor bolt testing.

Elk River Wastewater Treatment Plant Biosolids Dewatering Facility and Trickling Filter Odor Control Project, City of Eureka, CA
These two projects increased the capabilities for the greater Eureka area to treat solids in addition to providing pretreatment and odor control for the Elk River Wastewater Treatment Plant. SHN supported the City of Eureka with concrete testing, compaction testing, weld inspection, and high strength bolting inspection for both projects.

Netarts Force Main Project, HDD Company Netarts, OR
SHN is providing construction oversight for the Horizontal Directional Drill Contractor for an influent and effluent pipeline project in Netarts, Oregon. The project is constructing two, 20-inch diameter and 16-inch diameter HDPE pipes, totaling a distance of 2,930 feet.

Schedule

We will conduct all testing at the direction of your representative and in coordination with the construction management team, the Project Engineer, and contractor's superintendent. SHN has 15 technicians qualified to operate a nuclear soil moisture/density gauge and 13 technicians certified to collect concrete samples, which will ensure that SHN can respond promptly to the City's needs while contractor's work progresses. Laboratory and field results can be communicated both

verbally and in writing to prevent delays in construction. Turnaround times of the lab test results are subject to the requirements of the test methodology, but SHN will work aggressively to ensure that the samples are being processed efficiently and no time is lost in the lab.

Fees

Field activities related to materials testing and inspection are prevailing wage work. The following table outlines the rates that will be applied to your project for both prevailing wage and non-prevailing wage activities. We have included a copy of our current rate sheet, which shows costs for associated lab testing that our facility provides (Attachment).

SHN Prevailing Wage and Non-Prevailing Wage Rates		
Prevailing Wage Technician Group 1 & 2	International Code Council (ICC) Certified Masonry, Rebar, Structural Concrete Inspector, American Welding Society (AWS) Certified Weld Inspector	$110/hr
Prevailing Wage Technician Group 3 & 4	Compaction Testing, Concrete Sampling, ICC Certified Fireproofing Inspector, Anchor Bolt Inspector	$100/hr
Non Prevailing Wage Technician	Sample Pickup and Delivery, Batch Plant Inspection, Structural Steel Shop Inspection	$75/hr
Project Manager	Submittal Review, Project Oversight, Final Reports	$135/hr
Assistant PM	Project Scheduling, QA/QC	$90/hr

When the project schedule is created, **SHN will be happy to work with you to incorporate our unit costs into the project schedule to help project an anticipated cost for materials testing and inspection services during construction.** SHN can provide the following services for this project as outlined in the advertised Request for Proposals (RFP).

- ✓ Soil and Earthwork
- ✓ Concrete and Reinforcing Steel
- ✓ Structural Steel
- ✓ Masonry Construction
- ✓ As Requested Special Inspection of Post Installed Anchors
- ✓ Project Management

We suspect that other firms will present a "bottom-price estimate" for materials testing for your project. But SHN believes in being straight forward, and the truth is that total costs for testing and special inspection cannot be accurately assessed until the construction schedule is set. The following tables outline SHN's unit fees as they relate to the disciplines outlined in the RFP. These costs can be anticipated for a typical trip to the project to perform the special inspections and testing required. Each table lists specific costs for each activity and these costs can be incorporated into the projected construction schedule. The information below is provided so you can equally review all proposals once a schedule is determined.

Soil and Earthwork	
Prevailing Wage Technician	$100/hr
Travel & mobilization	$75/hr x 1 hr/trip
Moisture Density Gauge	$15/hr
Moisture Density Compaction Curve	$150/material type
Mileage	$0.80/mile x 50 miles round trip

Concrete and Reinforcing Steel	
Sampling Technician	$100/hr
ICC Certified Inspector	$110/hr
Concrete Compressive Strength	$25/sample x 4 samples/set
Travel & mobilization	$75/hr x 1 hr/trip
Mileage	$0.80/mile x 50 miles round trip
Cylinder Pickup and Log in	$75/hr x 1.5 hrs per trip
Concrete Mix Design Review	$135 hr x 1 hr/mix design submittal
Rebar Tensile and Bend	$110/sample

Structural Steel	
Prevailing Wage Certified Weld Inspector (CWI)	$100/hr
Manufacturing Shop CWI	$75/hr
Travel & mobilization	$75/hr x 1 hr/trip
Non-Destructive Testing Equipment	$12/hr
Welder Qualification or Weld Procedure Submittal Review	$135/hr
Mileage	$0.80/mile x 50 miles round trip

Masonry Construction	
ICC Certified Inspector	$110/hr
Grout/Mortar Compressive Strength	$25/sample x 3 samples/set
CMU Prism Compressive Strength	$80/ sample x 3 samples/set
Travel & mobilization	$75/hr x 1 hr/trip
Sample Pickup and Log in	$75/hr x 1.5 hrs per trip
Mileage	$0.80/mile x 50 miles round trip
Rebar Tensile and Bend	$110/sample

As Requested Special Inspection of Post Installed Anchors	
Prevailing Wage Technician	$100/hr
Travel & Mobilization	$75/hr x 1 hr/trip
Anchor Bolt Load Cell	$10/hr
Calibrated Torque Wrench	$5/hr
Mileage	$0.80/mile x 50 miles round trip

Project Management
SHN is happy to manage the various phases of work outlined in the above cost analysis. Project management includes scheduling tests and inspections to meet your needs and providing the letters and reports required.

Why SHN?

- SHN is a leader in Humboldt County for getting **special inspection done right the first time.**
- We have the advantage over firms outside of Humboldt County–we do not have to travel and can be on the job immediately.
- SHN's materials testing laboratory is the only local lab that meets the minimum accreditation (ASTM E329).
- SHN's materials testing team has a reputation for knowledge of code requirements, competency in inspections procedures, and integrity.
- Our special inspection team is built on a **large group of technicians certified in multiple disciplines.** When the call comes, SHN will respond promptly.

We will be happy to work on an on-call basis under the direction of your Construction Manager and/or Lead Inspector.

If you have any questions, please call me at 707-441-8855.

Sincerely,

SHN Consulting Engineers & Geologists, Inc.

Dave Gonzales
Laboratory Manager
Materials Testing and Inspection

DJG:lms
Attachment: SHN Laboratory Billing Schedule

Attachment 1

Resumes

Dave Gonzales

Materials Laboratory Manager

Areas of Expertise

- Construction materials testing and field inspection
- Special inspection testing of reinforcing steel, structural concrete, structural masonry, drilled in anchors, and high strength bolting
- Contractor quality control inspection and testing supervision
- Contractor laboratory and field testing technician

Years of Experience: 11

Years with SHN: 11

Education

High School Diploma, Fortuna Union High School, CA; 1996

Professional Registrations

American Concrete Institute, Field Testing Technician, Grade I; 2001, 2003, 2008; #00062454

Radiation Safety and Use of Nuclear Soil Gauges, Pacific Nuclear Technology; 2006

Annual Certification of Caltrans Procedures for Caltrans

International Code Council, Masonry Special Inspector #5304462-84, Reinforced Concrete Special Inspector #5304462-49

Relevant Experience

Mr. Gonzales has more than 11 years of construction inspection and materials testing experience. He has been primary special inspector and tester for projects that include road subbase soils cuts and fills including Hilfiker type wall systems, base aggregates, and asphalt materials in addition to underground utility installation for sewer and water construction. He has experience working for Local Agencies on projects funded through the America Recovery and Reinvestment Act to assure that the project is completed in conformance with plans, specifications, and regulatory requirements.

He is an accomplished structural concrete special inspector: his experience includes 2 years as the lead special inspector on a $127 million hospital project. Mr. Gonzales has experience providing rebar placement inspection for complex wall and foundation systems and providing drilled- in-anchorage inspections, both epoxy installed and mechanical wedge or sleeve anchor testing. He has inspected structural steel connections in metal building construction, including high strength bolt testing and installation inspection. He is also a DSA- and ICC- certified special inspector in structural masonry and has worked with masonry building contractors to ensure materials compliance for mortar, grout, and block.

Representative Public Works Projects:

Raw Water Intake and Filter Modification Project, City of Rio Dell, CA. Provided quality assurance testing for $3.6 million project including infiltration gallery, wet well structure with associated pumps, piping, and structural components. Included several thousand feet of pipeline.

Rio Dell Wastewater Treatment Plant Facility Upgrade Project, City of Rio Dell, CA. Provided quality assurance testing for upgrade of headworks facility and installation of drying belt system.

Rio Dell Wildwood Avenue Repaving and Rehabilitation Project, City of Rio Dell, CA. Provided quality assurance testing for ARRA-funded pavement overlay streetscape improvement project. Provided compaction testing for aggregate base, concrete sampling, hot mixed asphalt, mix design verification, and quality assurance.

Water System Improvements, Crescent City, CA. Construction inspector and quality assurance tester on project involving inspection services for over 15,000 lineal feet of 24- and 16-inch diameter transmission piping, a 4-million gallon welded steel storage reservoir, and over 40,000 feet of large diameter transmission pipe.

Elk River Wastewater Treatment Plant Biosolids Dewatering Facility, City of Eureka, CA. Provided quality assurance testing for construction of the Biosolids Storage Building project.

Division of the State Architect (DSA Certified Masonry Special Inspector #5109

The National Concrete Masonry Association, Certified Concrete Masonry Testing Technician, 2006, 2008

Elk River Wastewater Treatment Plant Trickling Filter Odor Control Project, City of Eureka, CA. Provided quality assurance testing for project to provide pretreatment and odor control.

Covelo Wastewater Treatment Plant Sewer Collector Replacement, Covelo CSD, CA. Provided quality assurance for project which included over 5,400 linear feet of sewer main, 40 sewer service connections, and replacement of 20 manholes.

Harbor Sanitary District 12 inch Sewer Force Main Project, Brookings, OR. Provided quality assurance for installation of a sanitary sewer pump station. Project also included the installation of a 12-inch sewer force main along US Highway 101, an 8-inch sewer force main, a 12-inch Chetco River crossing using HDD construction, a 15-inch sewer gravity main and associated appurtenances.

Representative Roads and Highways Projects

Alderpoint Bluff Road, CA ERFO & PFH 150-1(1), Federal Highway Administration; Six Rivers National Forest, Trinity County, CA. Quality control supervisor for contractor in 1.2-km road reconstruction project that involved repair of 4 slide locations in the roadway. Project included one bridge, 42 meters of tieback wall, 50,000 cubic meters of reconstructed and reinforced earth embankment, 900 tons of asphalt concrete, a 50-meter-long rock buttress, 3 HDPE culverts, and stream bank restoration.

Mad River Road, Phase 1, CA PFH 149-1(1), Federal Highway Administration; Six Rivers National Forest, Trinity County, CA. Quality control and materials testing and inspection. SHN provided materials testing and inspection for the $8-million rural roadway realignment. 3.8 km road reconstruction project included one bridge, an MSE wall, grouted rock embankments, 4 box culverts, 31 HDPE pipe culverts, rock buttresses, 33,000 cubic meters of roadway excavation, and 4,600 tons of asphalt concrete.

Confusion Hill Realignment, California Department of Transportation. Provided materials testing for two bridges that together span nearly 2000 feet and reach 253 feet in height.

Riverview Terrace Subdivision, Fortuna, CA. 44,000 cubic yards of cut, and 31,000 cubic yards of fill placed. Provided compaction testing and associated laboratory testing.

Jason R. Baugh

Construction Inspector & On-site Materials Testing

Areas of Expertise

- Construction materials and soil testing
- Special inspection and testing of reinforcing steel, structural concrete, structural masonry, drilled in concrete anchors, and spray applied fireproofing.
- Collection and testing of geotechnical soils samples

Years of Experience: 19

Education

B.S., Industrial Technology, Minor Business Management, Humboldt State University, Arcata, CA; 2002

Professional Registrations

International Code Council (ICC), Reinforced Concrete Special Inspector, 2009

International Code Council (ICC), Structural Masonry Special Inspector, 2009

International Code Council (ICC), Spray-Applied Fireproofing Special Inspector, 2009

National Concrete Masonry Association (NCMA), Certified Concrete Masonry Testing Technician, 2009

Radiation Safety Training, Pacific Nuclear Technology, Antioch, CA 2007

Annual Certification of Caltrans Procedures -2007-2011

American Concrete Institute, Field Testing Technician, Grade I 2007

RSO Training, Pacific Nuclear Technology; Willits, CA; 2010

Relevant Experience

Mr. Baugh has more than 19 years of experience in various trades in the construction industry, of which, he spent more than 10 years working for general building contractors.

Mr. Baugh is well qualified to collect and test construction materials, perform soil testing, and collect and test geotechnical soils samples. He is an expert in the field of special inspection and testing of reinforcing steel, structural concrete, structural masonry, drilled-in concrete anchors, and spray-applied fireproofing, which makes him a vital team member in our materials and testing department.

Representative Construction Special Inspection and Materials Testing Projects

Rio Dell Wastewater Treatment Plant Facility Upgrade Project, City of Rio Dell, CA. Provided quality assurance testing for upgrade of headworks facility and installation of drying belt system.

Rio Dell Wildwood Avenue Repaving and Rehabilitation Project, City of Rio Dell, CA. Provided quality assurance testing for ARRA-funded pavement overlay streetscape improvement project. Provided compaction testing for aggregate base, concrete sampling, hot mixed asphalt, mix design verification, and quality assurance.

Fishermen's Terminal, City of Eureka, CA. Provided quality assurance testing for commercial fishing dock, public gathering area with sculpture garden, fish processing building and marketplace.

Alliance Road Rehabilitation, City of Arcata, Humboldt County, CA. Provided quality assurance testing for ARRA-funded pavement overlay project. Provided compaction testing for aggregate base, concrete sampling, hot mixed asphalt, mix design verification, and quality assurance.

Summer Street and Hodgson Street Asphalt Overlay Projects, City of Eureka, CA. Provided quality assurance testing for ARRA-funded pavement overlay project. Provided compaction testing for aggregate base, concrete sampling, hot mixed asphalt, mix design verification, and quality assurance.

Caltrans Confusion Hill Bridge, Hwy 101, Humboldt County, CA. Materials Testing Technician –provided special inspection and materials testing services.

Elk River Wastewater Treatment Plant Biosolids Dewatering Facility, City of Eureka, CA. Provided quality assurance testing for construction of the Biosolids Storage Building project.

Public Works:

- McDaniel Slough, Phase I,II, and III, Arcata, CA
- National Guard Armory, Eureka, CA
- Cock Robin Island Boat Launch, Loleta, CA
- Eureka Skate Park, Eureka, CA
- Point St. George Reef Lighthouse, Crescent City, CA

Roads and Highways:

- Klamath Beach Road/Bridge Repair, Del Norte County, CA
- Inner Harbor Dock and Boardwalk, City of Eureka, CA
- Fortuna Boulevard Paving, City of Fortuna, CA
- Prop 1B Paving. City of Blue Lake, CA
- Scenic Drive Paving, City of Trinidad, CA
- Caltrans:
  - Highway 36 Bypass, Alton, CA
  - Mad River Bridge, Arcata, CA

Essential Services Buildings:

- Humboldt Bay Power Plant (HBPP), PG&E, Eureka, CA
  - Concrete and Soil Compaction Testing, New Spent Fuel Rod Storage Facility
  - Construction testing of crane/hoist support structure built for decommissioning of old plant–necessitated 60-hour safety training for working on a radioactive site
- Construction Testing at Various PG&E Substations and Corporation Yards:
  - Mitchell Heights Substation, Humboldt County, CA
  - 6th and "I" Streets Substation, Arcata, CA
  - W. 14th Street and Railroad Avenue Corp Yard, Eureka, CA
  - Myrtle Avenue Corp Yard, Eureka, CA

Joseph M. Aufdermaur

Senior Materials Testing Technician

Areas of Expertise

- Construction materials and biological testing
- Special inspection and testing of reinforcing steel, structural concrete, structural masonry, drilled in concrete anchors, spray applied fireproofing, high strength bolting, and pilings, drilled piers, and caissons
- Collection and testing of geotechnical soils samples

Years of Experience: 16

Years with SHN: 15

Education

B.S., Industrial Arts and Technology, Humboldt State University, Arcata, CA; 1985

Professional Registrations

Radiation Safety Training, Washington State University; 1989; Boart Longyear, Spokane; 1992

OSHA Laboratory Safety Training, Reno, NV; 1990

Annual Certification of Caltrans: 1994-2011

American Concrete Institute, Field Testing Technician, Grade I; 1995, 2003, 2008

RSO Training, Pacific Nuclear Technology; Eureka; 1997

International Code Council (ICC), Spray-Applied Fireproofing Special Inspector, 2006, 2009

International Code Council (ICC), Reinforced Concrete Special Inspector, 2008

Relevant Experience

Mr. Aufdermaur has more than 16 years of construction materials testing and biological testing experience. He has served as Senior Technician responsible for geologic and geotechnical boring logs, soils sampling, and materials testing. He has worked for the U.S. Department of Agriculture, as Biological Sciences Technician in research service. In addition, Mr. Aufdermaur has managed and coordinated research field experiments, collected plant, soil, and water samples for analysis, and has been responsible for chemical extraction for various laboratory procedures. Mr. Aufdermaur is experienced in providing special inspection for structural concrete and rebar placement and brings 15 years of experience in earthwork projects on the North Coast.

Representative Construction Special Inspection and Materials Testing Projects

Raw Water Intake and Filter Modification Project, City of Rio Dell, CA. Provided quality assurance testing for $3.6 million project including infiltration gallery, wet well structure with associated pumps, piping, and structural components. Included several thousand feet of pipeline.

Wastewater Treatment Plant Facility Upgrade Project, City of Rio Dell, CA. Provided quality assurance testing for upgrade of headworks facility and installation of drying belt system.

Wildwood Avenue Repaving and Rehabilitation Project, City of Rio Dell, CA. Provided quality assurance testing for ARRA-funded pavement overlay streetscape improvement project. Provided compaction testing for aggregate base, concrete sampling, hot mixed asphalt, mix design verification, and quality assurance.

Force Main Project, HDD Company, Netarts, OR. Provided construction oversight for the Horizontal Directional Drill Contractor for an influent and effluent pipeline project which included construction of two 2,930 feet of HDPE pipe of 20" and 16" diameter.

Fishermen's Terminal, City of Eureka, CA. Provided quality assurance testing for commercial fishing dock, public gathering area with sculpture garden, fish processing building and marketplace.

Elk River Wastewater Treatment Plant Trickling Filter Odor Control Project, City of Eureka, CA. Provided quality assurance testing for project to provide pretreatment and odor control.

Wastewater Treatment Plant Improvements, Resort Improvement District No. 1, Shelter Cove, CA. Provided quality assurance testing $3.7 million project to construct new wastewater treatment plant and an ocean outfall.

City of Arcata, Alliance Road Rehabilitation, Humboldt County, CA. Materials Testing Technician –provided special inspection and materials testing services.

Bureau of Indian Affairs, Big Valley Rancheria Casino Roadway, County of Lake, CA. Materials Testing Technician –provided special inspection and materials testing services.

Caltrans Confusion Hill Bridge, Hwy 101, Humboldt County, CA. Materials Testing Technician –provided special inspection and materials testing services.

U.S. Department of Transportation, Federal Highway Administration, Mad River Road Realignment Project, Trinity County, CA. Quality Control Technician –provided special inspection and materials testing services; verified that all materials and construction procedures met Federal Highway Administration specifications.

U.S. Department of Transportation, Federal Highway Administration Mad River Road landslide repair, Trinity County, CA. Materials Testing Technician –provided special inspection and materials testing services.

Roads and Highways:

- Project Manager for City of Fortuna's Rohnerville Road TEA Project STPLR 5145(005); Fortuna, California
- U.S. Department of Transportation, Federal Highway Administration, Mad River Road Realignment Project; Trinity County, California
- U.S. Department of Transportation, Federal Highway Administration Mad River Road landslide repair, Trinity County, California
- Caltrans:
  - Highway 36 at Dinsmore, 1998 Storm Damage Repair Project
  - Highway 101 at Benbow, 1997 Storm Drain Repair Project
  - Highway 101 at Fortuna, 1997 Storm Drain Repair Project
  - Highway 299 at Blue Lake, 1997 Storm Drain Repair Project
  - Highway 299 at Titlow Hill, 1999 Storm Damage Repair Project
- City of Eureka's Highway 101 Beautification Project; Eureka, California
- City of Fortuna's Carson Woods Road Bridge, Beech Street, Rohnerville Road, and 12th Street Storm Drain repair projects; Fortuna, California

Leif Ayres

Materials Testing Technician

Areas of Expertise

- ACI Certified
- Construction materials testing
- Concrete testing
- Soils testing

Years of Experience: 3

Years with SHN: 3

Education

B.S., Oceanography (Minor in Chemistry), Humboldt State University, Arcata, CA; 2003

A.A., General Education, Shasta College, Redding, CA; 1998

Professional Registrations & Certifications

Annual Certifications of Caltrans Procedures, 2008-2011

American Concrete Institute, Aggregate Testing Technician, Grade I; 2009

American Concrete Institute, Concrete Strength Testing Technician Grade I; 2009

American Concrete Institute, Laboratory Testing Technician Grade I; 2009

American Concrete Institute, ACI Aggregate Testing Technician, Level 1; 2009

Pacific Nuclear Technology Co., Nuclear Gauge Operator Training; 2009

Relevant Experience

Mr. Ayres has more than three years of construction materials, soils, and concrete testing experience in an AASHTO-accredited laboratory in which he has been responsible for various tests at a variety of essential services buildings, public works projects, commercial structures, and Caltrans testing throughout Humboldt County.

Representative Materials Testing Projects

Rio Dell Wastewater Treatment Plant Facility Upgrade Project, City of Rio Dell, CA. Provided quality assurance testing for upgrade of headworks facility and installation of drying belt system.

Rio Dell Wildwood Avenue Repaving and Rehabilitation Project, City of Rio Dell, CA. Provided quality assurance testing for ARRA-funded pavement overlay streetscape improvement project. Provided compaction testing for aggregate base, concrete sampling, hot mixed asphalt, mix design verification, and quality assurance.

Fishermen's Terminal, City of Eureka, CA. Provided quality assurance testing for commercial fishing dock, public gathering area with sculpture garden, fish processing building and marketplace.

Alliance Road Rehabilitation, City of Arcata, Humboldt County, CA. Provided quality assurance testing for ARRA-funded pavement overlay project. Provided compaction testing for aggregate base, concrete sampling, hot mixed asphalt, mix design verification, and quality assurance.

Summer Street and Hodgson Street Asphalt Overlay Projects, City of Eureka, CA. Provided quality assurance testing for ARRA-funded pavement overlay project. Provided compaction testing for aggregate base, concrete sampling, hot mixed asphalt, mix design verification, and quality assurance.

Public Works:

- Humboldt County Office of Education, Ecotone Project; Eureka, CA
- Arcata Airport Expansion and Renovation, McKinleyville, CA
- Stewart Street Tanks, Fortuna, CA
- Redway Water Tanks, Redway, CA
- Willits WWTP, Willits, CA
- Elk River WWTP, Eureka, CA
- Fort Bragg High School, Fort Bragg, CA
- California Department of Transportation Confusion Hill Realignment

Attachment 2

Fee Schedule

CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash Ave. • Eureka, CA 95501-2138 • 707-441-8855 • FAX: 707-441-8877 • gwilliston@shn-engr.com

2010 LABORATORY BILLING SCHEDULE

COMPACTION TESTING		
062	Nuclear Density Testing	$15/hour*
088	Compaction Curve	$150/test
092	Compaction Curve Check Point	$40/test
AGGREGATE TESTING		
071	Coarse Sieve Analysis	$45/ test
072	Specific Gravity Coarse Aggregate	$45/ test
065	Specific Gravity Fine Aggregate	$45/ test
073	Fine Sieve Analysis	$50/ test
090	Cleanliness Value	$75/ test
091	Durability, Coarse	$60/ test
093	Durability, Fine	$60/ test
096	Sand Equivalent	$50/ test
098	% Crushed Particles	$125/ test
179	Unit Weight of Aggregate	$30/ test
159	LA Rattler (Abrasion Resistance)	$150/ test
084	Sulfate Soundness	$80/cycle
064	Friable Particles	$80/test
104	Unconfined Compression of Rock Cores	$50/test
CONCRETE MATERIALS TESTING		
129	Mix Design	$200/each
132	Concrete Compressive Strength*ASTM C-39	$25/unit**
148	Concrete % Entrained Air	$10/test*
182	Concrete Linear Shrinkage (3 bars)	$200/ test
103	Compression of Drilled Cores	$25/ test
107	Sample Prep for Sawing Rocks and Concrete Cores	$30/unit
223	Unit Weight of Light Weight Concrete	$50/unit*
167	Concrete Moisture	$25/location*
219	Concrete Strength Rebound Hammer	$25/day
220	Disposable Concrete Molds	$2/each
ASPHALT TESTING		
229	HMA Job Mix Formula, Hveem Method	Upon request
163	Rice Specific Gravity	$70/ test
070	Bulk Specific Gravity of Compacted Mix	$30/ test
097	Asphalt Content by Nuclear Methods	$75/ test
095	Calibration of Asphalt Content Gauge	$190/each
243	Laboratory Mixing of HMA Samples	$75/each
085	Laboratory Compacting of HMA Samples	$50/each
230	Stabilometer of Premixed AC	$75/each
OTHER SERVICES		
133	Fireproofing Density	$50/test
142	Anchor Bolt Testing (load cell)	$10/hour*
172	Core Drilling Machine	$75/day*
173	Diamond Bit Core Barrel	$3/inch
109	Rebar Locating Device	$5/hour*

SOILS TESTING		
067	Leachfield Textural Suitability (USDA)	$50/test
070	Bulk Density	$20/test
069	Particle Size Analysis	$100/test
074	Moisture – Density	$25/test
079	Moisture Content	$15/test
075	Sieve Analysis (passing 200)	$45/test
086	Consolidation	$300/test
077	Percent Organics	$50/test
076	Liquid Limit	$75/test
078	Plastic Limit	$50/test
080	Plastic Index	$125/test
082	Unconfined Compressive Strength	$50/test
183	Swell Test	$55/point
176	Expansion Index	$150/test
166	R-Value	$225/test
DIRECT SHEAR		
156	Consolidated Drained (CD)	$130/point
157	Unconsolidated Undrained (UU)	$100/point
158	Consolidated Undrained (CU)	$115/point
162	Additional Cycles	$50/each
TRIAXIAL COMPRESSION		
321	TXUU (Unconsolidated Undrained)	$115/point
322	TXCU (Consolidated Undrained)	$385/ point
323	TXCD (Consolidated Drained)	$500/ point
325	TXCU -3 stage	$810/ point
326	TXCD-3 stage	$860/ point
MASONRY TESTING		
150	Masonry Block Compressive Strength	$65/unit
151	Masonry Block Absorption & Moisture	$50/unit
152	Masonry Block Linear Shrinkage	$85/unit
153	Masonry Block Prism Compressive Strength	$125/unit
181	Masonry Block Freeze-Thaw	$250/test
221	Masonry Core Shear Testing	$50/unit
	Grout Compression Strength	$30/each
STRUCTURAL STEEL/WELDING SERVICES		
174	Torque Wrench for High Strength Bolts	$5/hour*
175	Skidmore-Wilhelm Bolt Tension Calibrator	$40/day
044	Ultrasonic Test Device (Welding Flaw Detection)	$12/hour*
210	Magnetic Particle Testing	$10/hour*
211	Ultrasonic Thickness Testing of Materials	$100/day*

NOTES:
1. Soils described by Unified Soil Classification System (USCS; ASTM D-2487) unless otherwise noted.
2. Not all tests listed.

* Plus certified field technician ($75-$100/hr) and $0.80/mile door to door

** If concrete or core is sampled and delivered to lab by an outside contractor add $5/unit for specimen processing and curing per ASTM C-31